1917

The

ARCHITECTVRAL RECORD





PVBLISHED IN NEW YORK 35 CENTS A COPY \$ 500 A YEAR







Does More

In homes like these, from California to Maryland, from Texas to Massachusetts

OFFMAN

Instantaneous

WATER HEATERS

are performing a daily service unsurpassed for its economy and dependability. They are made in varying sizes and types conforming to the needs of the palatial residence, country estate, dwelling of modern size or cozy cottage. They are indispensable as a truly modernizing factor of the present day building.

They combine utmost serviceability with lowest maintenance cost, as proved by the remarkable service they provided in all the buildings of the Panama-Pacific Exposition—a service which won the highest award—the medal of honor. This service, meeting as it did the needs of hundreds of thousands of visitors, exceeded all possible demands your clients will ever make upon this equipment, and in itself is a sufficient guarantee upon which to base your specifications.

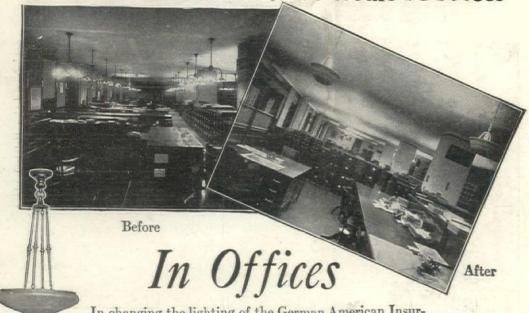
But we go one step further—we guarantee the Hoffman to live up to your recommendations and to satisfy your most fastidious client. This guarantee is as liberal as you yourself would wish it. It is your protection.

Write for catalog. You'll find it invaluable in connection with your future requirements.

THE HOFFMAN Heater CO. LORAIN, OHIO



X-Ray Lighting from Concealed Sources



In changing the lighting of the German American Insurance Company's offices, Chicago, from direct to X-Ray Indirect Lighting as shown above

—each X-Ray Fixture displaced seven direct lighting chandeliers. Result: 1/7 the number of fixtures—1/7 the number of outlets—1/7 the wiring cost.

- -glare was eliminated.
- -desk lights were made unnecessary.
- —eye strain and resultant headaches were abolished and working efficiency increased.
- —the lighting was made independent of the arrangement of furniture.
- —the entire office was lighted uniformly.
- -brightness and cheerfulness supplanted dimness and gloom.

Architect's Portfolio of Installations FREE

This portfolio which standardizes lighting specifications will prove of value to every architect. Shows how to plan the lighting when you plan the building. FREE with new plates as issued—to architects only. To others \$5.00.



NATIONAL X-RAY REFLECTOR CO.

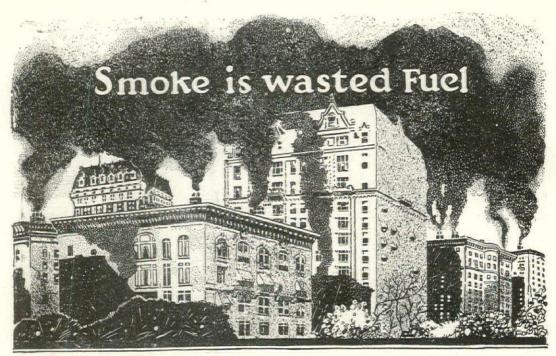
222 W. Jackson Blvd., Chicago

21 West 46th Street, New York

REGENT SHADES BOWLS GLOBES

IGHTED or unlighted—a "Rozelle" color-decorated shade is equally pleasing either way. That's a peculiarity of the result obtained by the exclusive Rozelle method. These daintily colored shades, bowls and globes are new. The process is new. The effect is new. You can't imagine their appearance by comparing them with anything you're familiar with. You must see the original Rozelle or you don't know what Rozelle is. May we tell you where you may see samples? IVANHOE-REGENT WORKS of General Electric Company 1131 East 152nd Street CLEVELAND, OHIO For all Canadian business refer to Canadian General Electric Co., Ltd., Toronto, Ont.





Cut out Smoke and Cut Heating Costs

Do you realize that smoke (which is nothing but unconsumed fuel) is costing building owners thousands and thousands of dollars every year? And it is as unnecessary as it is costly.

If you will insist on the installation of a boiler that will burn any soft coal smokelessly you practically guarantee your clients immunity from "Smoke Ordinances" and a saving in their coal bills that may be as much as one-third and will be one-fourth at least.

KEWANEE Smokeless Boilers Cut Heating Costs

The price of hard coal is going up so high that a building owner must either put in a boiler that will burn soft coal smokelessly—or have his coal bills eat up all the profits.

Several thousands of buildings, in all parts of the country, are burning the cheapest kinds of soft coal—and are complying with the most rigid smoke ordinances in force. And the owners are pocketing big savings in heating costs.

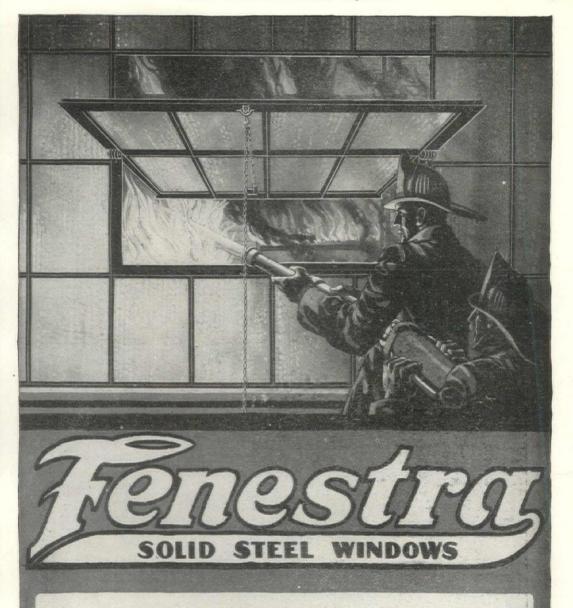
Our nearest office wants to show you, and prove to you, how a Kewanee Smokeless Boiler cuts heating costs.



KEWANEE BOILER COMPANY

KEWANEE, ILLINOIS

Steel Heating Boilers, Radiators, Tanks, Water Heating Garbage Burners Chicago New York St. Louis Kansas City Minneapolis Pittsburgh



WHILE WOOD WINDOWS BURN, Fenestra solid steel windows are a sure barrier of safety for the fire-fighter.

And this same protection—the best kind of insurance—is yours with Fenestra sash. There is Fenestra Sliding Sash for the office building, as well as Fenestra side-wall sash for the factory or warehouse.

Every modern factory is an advertisement for Fenestra Solid Steel Windows, made where most of America's steel windows are made—at the Detroit Steel Products Company, 2310 East Grand Boulevard, Detroit, Michigan.



Jno. Williams, Inc.

Architectural Bronze Sculptural Work

> Founded in 1875 By John Williams



and Wrought Iron Work in Bronze

Incorporated 1905

OFFICE: 556 WEST 27th STREET, NEW YORK



Wrought Iron Stair Railing For F. W. Crowninshield, Esq., Boston, Mass.

> Designed by Bellows and Aldrich, Architects 8 Beacon Street, Boston, Mass.

"Forge and Furnace." Illustrated pamphlet, showing fine examples of artistic wrought iron work by Jno. Williams, Inc. Copies sent free to practising Architects.

Bilchaco Paints and Varnishes

For interior walls and ceilings

ARTONE

Because of the beautiful dull finish color effects produced; its great covering capacity; its opacity, and its easy spreading properties "Artone" is being specified and used more and more for decorating interior walls and ceilings of plaster, cement, wood, metal or wall board. The 16 "Artone" Flat Finish colors offer a wide range of selection for harmonious and pleasing color schemes.

Beautiful Tiffany Blends



With the various "Artone" French Glaze colors, rich, beautiful Tiffany blends and mottled effects can be produced at low cost. This type of finish is comparatively new and offers unlimited possibilities for originality in interior decorating, ranging from the dainty, delicate green, blue and ivory tints to the rich gold, silver and copper bronze treatments.

Large complete color charts describing "Artone" Flat Finish and French Glaze will be mailed promptly on request. Write for them today.

By specifying Bilchaco Paints and Varnishes you insure your clients most beautiful and serviceable results, at relatively low cost. Ask for sample slats, with descriptive literature of these varnishes and any other paint or varnish products in which you are interested.

"Bilchaco" Products are catalogued in Sweet's, Page 49; and displayed at the Architects' Samples Corporation, New York.

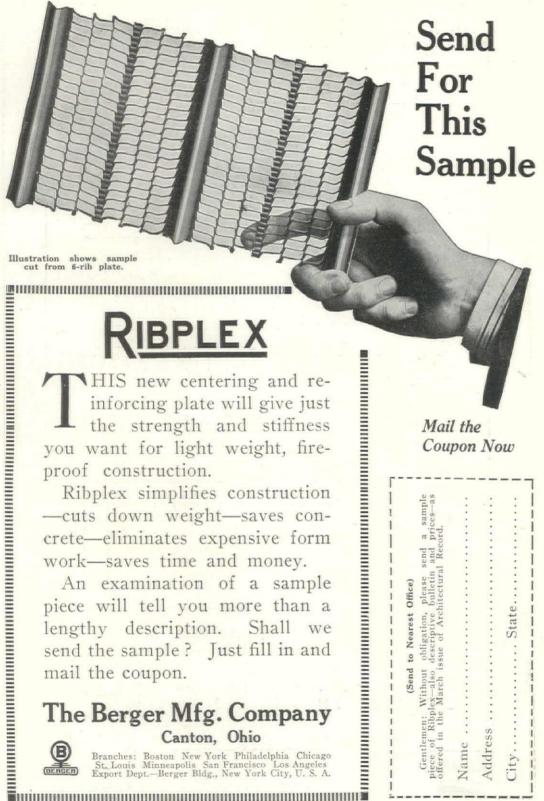
The Billings-Chapin Co.

Makers of Finest Paints and Varnishes

Boston

CLEVELAND

New York



the strength and stiffness you want for light weight, fireproof construction.

Ribplex simplifies construction -cuts down weight-saves concrete—eliminates expensive form work-saves time and money.

An examination of a sample piece will tell you more than a lengthy description. Shall we send the sample? Just fill in and mail the coupon.

The Berger Mfg. Company Canton, Ohio



Branches: Boston New York Philadelphia Chicago St. Louis Minneapolis San Francisco Los Angeles Export Dept.—Berger Bldg., New York City, U. S. A.

Mail the Coupon Now

TENNESSEE MARBLE

Don't Decide on the Marble

until you have sent for a complete set of samples of

APPALACHIAN MARBLE

A variety of colors and markings to select from

FACILITIES—We own and operate our own quarries and have an unlimited supply of select marble. Our facilities for the prompt turning out of work are unsurpassed. We employ only the most skilled mechanics and spare neither time nor expense in furnishing first-class work. Samples of our marble showing variety of colorings will be sent interested architects on request.

We will cheerfully give Architects all desired information regarding our products

Appalachian Marble Co. Knoxville Tenn.



Showing the first, second and third floor joists and partitions. Otis Goddard, Architect.

BERGER'S Metal Sumber

THE isometric perspective view opposite shows the details of Berger's Metal Lumber standard construction for floors, supporting partitions and suspended ceilings. The illustration above shows a typical installation in which this construction was used.

Note that joists are placed directly over supporting studs, and rivets used for connections thruout, assuring rigidity and strength of construction that cannot otherwise be obtained.

Note also the installation of plumbing pipes, conduits, etc. The bridging or bracing on partitions is important; this is applied before metal lath and serves to stiffen the partitions. Nailing blocks are inserted between study for attaching wainscoting.

This fireproof and indestructible construction is used extensively in apartments, office buildings, hotels, institutions, etc., and gives exceptional strength and permanency at reasonable cost.

Send for Bulletin 12 A. R.

It contains complete technical information covering lincluding tables of sel loads; size, weights and lengths of material; points of interest in design; use and adaptability; reasons for past and present extensive use; and agpecifications.

See Sweet's, pages 220-227

The Berger Mfg. Co., Canton, 0.

Branches: Boston New York Philadelphia Chicago
St. Louis Minneapolis San Francisco Los Angeles
Export Dept.—Berger Bidg., New York City, U. S. A.

ARKANSAS SOFT PINE

Satin-like Interior Trim

Affords a wide choice of figure for any specified stained effect.

Well balanced absorbing qualities combined with definite certainty against raised grain, give this wood individual merits as an interior finish.

Being non-resinous it will not discolor white enamel finishes, but will hold blue white or old ivory to their original tones, permanently.

Samples and finishing book on request. Also Architects' Manual.

Arkansas Soft Pine is Trade Marked and sold by dealers. Yours can supply it.

Arkansas Soft Pine Bureau

220 Bank of Commerce Bldg. Little Rock, Ark.

For Light Weight, Fireproof Floors



Showing Berger's Pressed Steel Cores installed in the Junius Hotel, Chicago, I Architect, Henry K. Holsman, Chicago. Contractors, C. A. Moses Construction Co., Chicago.

N schools, hotels, apartments, office buildings, warehouses, etc., where the required live load does not exceed 200 lbs. per sq. ft. specify

Berger's Pressed Steel Cores

They can be laid quicker than any other type of long-span floor construction—Reduce dead load concrete from 40% to 60%, without decreasing strength—Save concrete and reinforcing steel—Minimize centering and form work—Easily and economically installed. Both permanent and removable cores.

Specify Permanent Sidewalk Lights

YOU know the advantages of providing daylight for the basements of your clients' buildings. And, as your interest in these buildings continues long after their completion, you naturally desire to specify a system that is effective and permanent.

Randiant

"Special" System of Sidewalk Lights

provides the maximum light, is exceptionally strong and simple to install. Its permanency is assured by the easy replace feature, which permits broken glass to be replaced in a practical and watertight manner. This feature applies to the round, plain square, three-point prism and deep pendant prism glass.

Therefore, by specifying Berger's Raydiant Special System, your ability is recognized at building time and years later.

Write now for blueprints and new Catalog T. A. R.



Baugh & Vetman Store, Brown-Marx Bldg., Birmingham, Ala. Wm. C. Weston, Architect.



The Berger Manufacturing Company, Canton, O.

Branches: Boston New York Philadelphia Chicago St. Louis Minneapolis San Francisco Los Angele Export Dept.—Berger Bidg., New York City, U. S. A.



If you want beautiful doors in that new hotel, hospital, office building or residence, use

RODDIS' FLUSH VENEERED DOORS

In fine woods, like mahogany and Circassian walnut, they are less expensive than the old style doors.

They are sanitary.

They are sanitary.

They retard fire and sound.

They will not shrink and swell.

There are no joints to come apart.

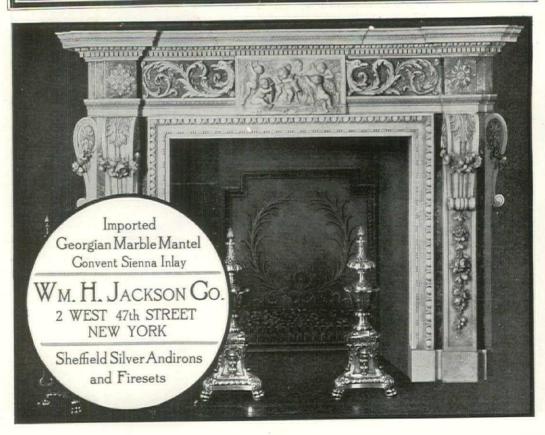
They grow richer in appearance with age.

They possess dignity and character, and give the same sense of well being as any other superior article. Standing before the beautiful polished surface of this door, one cannot fail to be impressed with its richness.

Send for our catalog showing these doors in the natural colors of the wood.

RODDIS LUMBER & VENEER CO.

Marshfield:::::::: Wisconsin





CONCRETE-STEEL PRODUCTS CO. STRUCTURAL DESIGN

Mc CORMICK BUILDING-

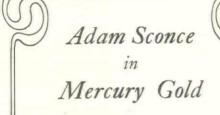
CHICAGO, ILL.



IN THE PAST TWENTY FOUR MONTHS WE HAVE PREPARED FOR THE CENTRAL MANUFACTURING DISTRICT ENGINEERING DESIGNS FOR FOUR BUILDINGS AGGREGATING IN COST OVER THREE MILLION DOLLARS. THIS CONTINUOUS SERVICE ON IMPORTANT WORK IS A TESTIMONY TO OUR ENGINEERING.

OUR ENGINEERING SERVICE INCLUDES THE DESIGNING OF STRUCTURAL STEEL AND ALL CLASSES OF CONCRETE CONSTRUCTION

WE ARE DESIGNING AND CONSULTING ENGINEERS EXCLUSIVELY





An example of the handicraft of our shops

Write for special booklet

Victor S. Pearlman & Co.

75 E. Adams Street, Chicago Pullman Building

Factory: 128-132 S. Wabash Av.

Indianapolis Agency: THOR U. RAMSING 1018 N. New Jersey Street Indianapolis, Ind.

Gutters, Mouldings, Conductors

of Cypress conform to the best architectural practice and do not decay.

STEARNS

Florida Gulf

CYPRESS

-grown, as it is, in Southern Swamp Lands, is perhaps in its native element when used as mould-ings, gutters or conductors of water.

As a wood of century abiding service, it needs no introduction. Cypress shingles improve under weathering influences. We would however emphasize the interior decorative possibilities of the Florida Gulf wood.

Write for interesting data and catalog No. 9.

The A. T. Stearns Lumber Co.

Neponset, Boston, Mass.



When writing enclose 20c stamps and ask for CATALOGUE "R-29"

A FREE COURSE in Architectural Design

Conducted by the Society of
Beaux-Arts Architects and
Free Courses in Sculpture and Painting
in their Application to Architecture
Under the joint direction of the Society of Beaux-Arts Architects,
the National Sculpture Society and the Mural Painters.

Architectural Design Ornamental Modeling

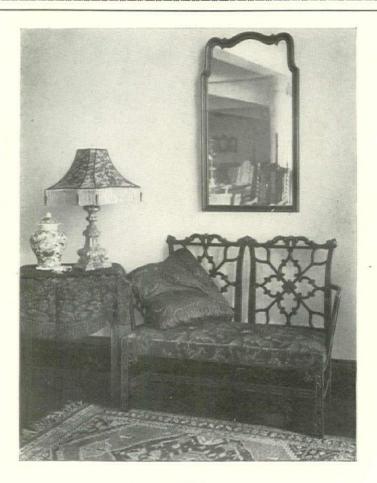
Mural Painting

Ornamental Modeling Mural Painting
These courses are modeled on the principles of teaching of the
Ecole des Beaux-Arts of Paris, and are intended for the instruction
of students of Architecture, Sculpture and Painting, and of apprentices and workmen in the artistic trades allied to Architecture. Any
course may be entered at any time during the year. The courses in
Architecture and Painting may be done outside of New York City.
For the courses in Sculpture and Ornamental Modeling the Society
maintains its Sculpture Studio in its Building, in New York City.
For Circulars of Information concerning any of the above courses,
apply to Mr. Charles Morrison, Secretary, Building of the Society of
Beaux-Arts Architects, 126 East 75th St., New York City.



Reinforced Concrete Terminal Warehouse - Baltimore and Ohio Railroad, New York

Reinforced concrete lends itself with peculiar fitness to buildings where economy, fire-protection and permanence are demanded. The architectural possibilities of this medium, however, are just beginning to be realized and their development promises a new contribution to our architecture—industrial buildings efficient and economical, but architectural. The architects who are interested in reinforced concrete are invited to write to The Atlas Portland Cement Company, New York or Chicago.



Variety of Patterns

SITKS CHENEA

WHEN a decorator wants variety with the same material and color scheme, he relies on the diversity of Cheney Upholstery and Decorative Silks.

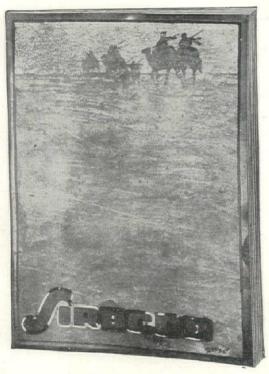
In the illustration above three different patterns of gold and tinsel Chinese Brocade are used for the table cover, cushion and Chippendale settee. The Cheney Mysore Silk of the lamp-shade adds a lighter touch in perfect keeping with the figured brocade.

Cheney Silks are known also for their great

beauty and long usefulness.

To those purchasing sample lengths of these silks we will gladly send color swatches showing the entire range in which they are made.

CHENEY BROTHERS, Silk Manufacturers FOURTH AVENUE AND 18TH STREET, NEW YORK



A Book

of Architectural and Industrial Pictures

An unusual collection of more than one hundred striking photographs which illustrate scores of different installations.

Descriptions and illustrations of actual applications, the majority of which are particularly

interesting from the standpoint of location or size, and many are worthy of particular note because of a service being well rendered in the handling of a difficult task.

The "Sirocco" Book, in short, contains a brief outline (mostly in picture) of the exact kind and quality of service which the American Blower Company have for you.

We suggest you ask Today for Your Copy.

AMERICAN BLOWER COMPANY

DETROIT, MICHICAN



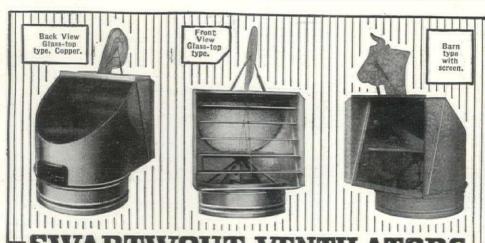
An Index to the Advertisements



Classified Directory for Architectural Specifications on page 22

Page.	Page.	Page.
*American Blower Co	*General Electric Co99-3d Cover *Gillis & Geoghegan	Pearlman & Co., Victor S
Tille Co	Hammer Lumber Co., The	*Reliance Ball Bearing Door Hanger Co
*Badger & Sons Co., E. B 50 *Barrell Co., Wm. L	*Jackson Co., Wm. H	Sorlien Celling Bed Co
*Cabot, Samuel, Inc	port Co. 94 *Kennedy Valve Mfg. Co. 80 *Kewanee Boiler Co. 4 Kevstone Varnish Co. 40 *Kohler Co. 123 Koven & Bro. L. O. 120 Lane Co. John 110 Langstadt-Meyer Co. 84 *Luowe Bros. Co. 29 *Lupton's Sons Co. David 87	*Taylor Co., N. & G
Corbin, P. & F. 49 *Corrugated Bar Co 63 Country Life Permanent Exposition 118 *Crane Company 62 *Crittall Casement Window Co 98	*Maddock's Sons Co., Thomas. 56 Magnesia Assoc. of Am 25 *Majestic Co., The 77 *McCray Refrigerator Co 79 McFaddin & Co., H. G 40	*Union Metal Mfg. Co
*Dahlstrom Metallic Door Co 71 *Dayton Malleable Iron Co 94 Decorators' Supply	McFaddin & Co., H. G	*Vitrolite Co., The
*Federal Terra Cotta Co 73 *Fischer & Jirouch Co., The. 92 *Fox Co., M. Ewing 40 *Galloway Terra Cotta Co 84	*Oak Flooring Bureau	*Wright Wire Co113 *Youngstown Sheet & Tube Co. 66 *Zahner Metal Sash & Door Co. 83

Catalogue of concerns marked * will be found in the 1916 Edition of Sweet's Catalogue of Building Construction.



SWARTWOUT VENTILATORS

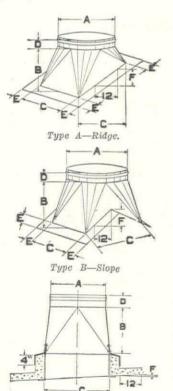
Rotary Ball-Bearing

are backed by a definite service to Architects

BECAUSE the subject of ventilation is a difficult one—because each installation has its peculiar angles, its individual problems, we back up what we thoroughly believe to be the most efficient ventilator on the market with an expert service to architects and engineers.

In our organization are many men who devote their whole time to ventilation engineering. Their recommendations combine personal experience with all types of structures, personal contact with erecting and installation problems, personal study of old structures on which we have been called in to remedy air conditions.

The mass of ventilating experience which they have collected is at your disposal. Every day our sales-engineers are referring problems, submitted by painstaking architects, to this engineering department. We will welcome an opportunity to serve as ventilation counselors to you. The service is absolutely without obligation.



These base drawings (with full specifications) are from our catalog "THE GOSPEL OF FRESH AIR." They are a sample of the type of information it contains.

Type C-Concrete

It is yours free on request.

The Ohio Blower Company

5127 Perkins Ave., Cleveland, Ohio

Branch Offices and Agents in Principal Cities

Sec it in Sweet's



Architectural Faience. Rookwood Pottery Co., Cincinnati, O. Architectural Instruction.

Architectural Instruction.
Society Beaux Arts Architects, 126 E. 75th St.,
N. Y. C.
University of Pennsylvania, Philadelphia, Pa.
Architectural Supplies.
American Lead Pencil Co., 224 Fifth Ave., N. Y. C.
Dixon Crucible Co., Joseph, Jersey City, N. J.
Higgins Co., Chas. M., 271 9th St., Brooklyn, N. Y.
National Tracing Cloth Co., Saylesville, R. I.

National Ti Boyle, John, & Co., Inc., 112 Duane St., N. Y. C. Awnings.

Wilson Corp., The J. G., 8 W. 40th St., N. Y. C. Birch. Northern Hemlock & Hdw. Mfrs. Association,

Wausau, Wis.

Blinds. Wilson Corp., The J. G., 8 W. 40th St., N. Y. C. Blowers.

American Blower Co., Detroit, Mich.
Clarage Fan Co., Kalamazoo, Mich.
Boiler and Pipe Covering.
Magnesia Association of America, 381 Fourth Ave.,
N. Y. C.

Bolta-Expansion.
Ankyra Mfg. Co., Philadelphia, Pa.
Brass and Bronze Workers.
Gorham Co. (Architectural Bronze), N. Y. C.
Hecla Iron Works, Brooklyn, N. Y.
Polachek Bronze & Iron Co., John, Long Island City, N. Y.
Williams, Inc., Jno., 556 W. 27th St., N. Y. C.
Winslow Bros. Co., Chicago, Ill.

Brick. Brick.

American Enameled Brick & Tile Co., 52 Vanderbilt Ave., N. Y. C.

Hydraulic Press Brick Co., St. Louis, Mo. Sayre & Fisher Co., 261 Broadway, N. Y. C.

Bridges—Steel.

American Bridge Co., 30 Church St., N. Y. C.

Brushes.
Whiting, John L.-Adams Co., J. J., Boston, Mass.
Buildings—Steel.
American Bridge Co., 30 Church St., N. Y. C.
Building Papers.
Johns-Manville Co., H. W., N. Y. C.
Canvas Work.
Boyle, John, & Co., Inc., 112 Duane St., N. Y. C.
Casements. Brushes

Casements.
Crittall Casement Window Co., Detroit, Mich.
Hope & Sons, Henry, 103 Park Ave., N. Y. C. Hope & Ceiling Bed.

Sorlein Ceiling Bed Co., Minneapolis, Minn.

Ceilings—Metal.
Wheeling Corrugating Co., Wheeling, W. Va.

Cellar Drainer.
Penberthy Injector Co., Detroit, Mich.

Alpha Portland Cement Co., Easton, Pa.
Alpha Portland Cement Co., 30 Broad St., N. Y. C.
Edison Portland Cement Co., 1133 Broadway,
N. Y. C.
Cement—Caenstone.
Cleveland Builders' Supply Co., Cleveland, O.

Coal Chute.

Majestic Co., Huntington, Ind.

Columns.

Columns.

Hartmann-Sanders Co., Chicago, Ill.
Union Metal Mfg. Co., The, Canton, O.

Concrete Construction—Reinforced.
Berger Mfg. Co., Canton. O.
Corrugated Bar Co., Buffalo, N. Y.
North Western Expanded Metal Co., Chicago, Ill.
Trussed Concrete Steel Co., Youngstown, O.

Concrete Inserts.

Concrete Inserts. Dayton Malleable Iron Co., Dayton, O. Conduits-Electric.

National Metal Molding Co., Pittsburgh, Pa.

Conduits—Flexible and Rigid.

Western Conduit Co., Youngstown, O.

Copper Boilers.

Badger, E. B., & Sons Co., Boston, Mass.

Cotton Duck.

Boyle, John, & Co., Inc., 112 Duane St., N. Y. C.

Covering-Pipe and Boiler.

Magnesia Association of America, 381 Fourth Ave.,
N. Y. C.

Cypress.
Stearns, A. T., Lumber Co., Neponset, Mass.
Southern Cypress Manufacturers' Association,
1211 Hibernia Bank Bldg., New Orleans, La.
Decorations—Plastic Relief.
Fischer & Jirouch Co., Cleveland, O.
Door Hangers.
Reliance Ball Bearing Hanger Co., 70 E. 45th St.,
N. Y. C.

ors.

Dahlstrom Metallic Door Co., Jamestown, N. Y.
Merchant & Evans, Philadelphia, Pa.
Roddis Lumber & Veneer Co., Marshfield, Wis.
Thorp Fireproof Door Co., Minneapolis, Minn.
Wilson Corp., The J. G., 8 W. 40th St., N. Y. C.
The Zahner Metal Sash & Door Co., Canton, O.

Drawing Inks. Higgins Co., Chas. M., 271 9th St., Brooklyn, N. Y.

Higgins Co., Chas. M., 271 9th St., Brooklyn, N. Y. Electrical Equipment.
General Electric Co., Schenectady, N. Y. Hart & Hegeman Mig. Co., Hartford, Conn. Hubbell, Inc., Harvey, Bridgeport, Conn. Johns-Manville Co., H. W., N. Y. C. Langstadt-Meyer Co., Appleton, Wis. Simplex Wire & Cable Co., Boston, Mass. Western Electric Co., N. Y. C. Westinghouse Electric & Mig. Co., East Pittsburgh, Pa.

Elevators. American Elevator & Machine Co., Louisville, Ky. Otis Elevator Co., 26th St. and 11th Ave., N. Y. C.

Clis Elevator Co., 25th St. and 11th Ave., N. Y. C.
Enamel—White.

Arco Co., The, Cleveland, O.
Boston Varnish Co., Boston, Mass.
Glidden Varnish Co., Cleveland, O.
Murphy Varnish Co., Newark, N. J.
O'Brien Varnish Co., South Bend, Ind.
Pratt & Lambert, Inc., Buffalo, N. Y.
Smith, Edward, & Co., Long Island City, N. Y.

Engineers-Designing and Consulting. Concrete Steel Products Co., Chicago, Ill.

Clarage Fan Co., Kalamazoo, Mich.

Clarage Fan Co., Kalamazoo, Mich.
Faucet Manufacturers.
Glauber Brass Mfg. Co., Cleveland, O.
Fireplace Fixtures.
Jackson Co., W. H., 2 W. 47th St., N. Y. C.
Fireproof Doors, Shutters and Windows.
Crittall Casement Window Co., Detroit, Mich.
Detroit Steel Products Co., Detroit, Mich.
Hope & Sons, Henry, 103 Park Ave., N. Y. C.
Merchant & Evans, Philadelphia, Pa.
Thorp Fireproof Door Co., Minneapolis, Minn.
Trussed Concrete Steel Co., Youngstown, O.
Wilson Corp., The J. G., 8 W. 40th St., N. Y. C.
Fireproofing.

Fireproofing.

Berger Mfg. Co., Canton, O.
Johns-Manville Co., H. W., N. Y. C.
Taylor Co., N. & G., Philadelphia, Pa.
Thorp Fireproof Door Co., Minneapolis, Minn.
Trussed Concrete Steel Co., Youngstown, O.
Wright Wire Co., Worcester, Mass.

Floor Finish or Finish.

Billings-Chapin Co., The, Cleveland, O.
Boston Varnish Co., Boston, Mass.
De Voe, F. W., & C. T. Raymolds, N. Y. C.
Glidden Varnish Co., Cleveland, O.
Keystone Varnish Co., Brooklyn, N. Y.

Advertisements in this issue, of the above manufacturers, are indexed on page 20.



In Grand Rapids, for instance-

In almost any American city—you can pick out any of the leading commercial buildings and say with fair certainty, "That building has a Barrett Specification Roof."

Take the city of Grand Rapids, for instance. Here are the four newest buildings: the new Bank, a new Wholesale Grocery, the new Y. M. C. A., and the new Hotel.

They all have Barrett Specification Roofs.

Most permanent buildings in the country carry this type of roof—and their popularity is not to be wondered at when you consider the following features:

First: Lowest unit cost per year of service.

Second: Guaranteed for twenty years, with a record which shows that they last much longer.

Third: Freedom from maintenance expense.

Fourth: Approved as "Class A" construction and take the base rate of fire insurance.

Tile, Slate, Shingle and Ready Roofings—all have their place on different types of steep-roofed buildings; tin is now rarely used for roofing. For all important commercial structures, however, the standard practise calls for Barrett Specification Roofs.

Guaranteed for 20 Years

We are now prepared to give a 20-Year Surety Bond Guaranty on every Barrett Specification Roof of fifty squares and over in all towns in the United States and Canada of 25,000 population and more, and in smaller places where our Inspection Service is available. This Surety Bond will be issued by the United States Fidelity and Guaranty Company of Baltimore and will be furnished by us without charge. Our only requirements are that the roofing contractor shall be approved by us, and that The Barrett Specification, dated May 1, 1916, shall be strictly followed.

The Barrett Company

Largest Manufacturers in the World of Roofing and Roofing Materials

New York Chicago Philadelphia
St. Louis Cleveland Cincinnati
Detroit Birmingham Kansas City
Nashville Salt Lake City

Nashville Salt Lake City Peoria Seattle
THE PATERSON MFG. CO., Limited: Montreal Toronto
Winnipeg Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

Boston Pittsburgh Minneapolis



National City Bank, Grand Rapids, Mich. Architects: Williamson & Crow Contractors: Hauser, Owen, Ames Co. Roofing Contractors: Elkenhout & Sons Co.



Caulfield Building, Grand Rapids, Mich, Architects: Wernette, Bradfield & Mead Contractors: Horner & Kelly Roofing Contractors: Eikenhout & Sons Co



Y.M.C.A. Building, Grand Rapids, Mich. Architects: Robinson & Campau Contractors: Hauser, Owen, Ames Co. Rfg, Contractors: Geo, Vander Brock Co.



Pantlind Hotel, Grand Rapids, Mich. Gen. Contractor: Fuller Construction Co., N.Y.C. Rfg. Contractors: M. W. Powell Co., Chicago, Ill. Waterproofing Contrs.: Tuttle Roofing Co., N.Y.C.

A DIRECTORY FOR ARCHITECTURAL SPECIFICATIONS—Continued.

O'Brien Varnish Co., South Bend, Ind. Pratt & Lambert, Inc., Buffalo, N. Y. Smith & Co., Edward, Long Island City, N. Y.

Smith & Co., Mm. L., 87 Thomas St., N. Y. C.
Barrell Co., 17 Battery Pl., N. Y. C.
Oak Flooring Bureau, Chicago, Ill.
Sonneborn Sons, Inc., L., 263 Pearl St., N. Y. C.
Freight Elevator Gates.
Steelite Co., The, Cleveland, O.

Furnishers. Nelson Co., W. P., Chicago, Ill.

Fuse Plug.
Atlas Selling Co., 450 Fourth Ave., N. Y. C.

Atlas Selling Co., 450 Fourth Ave., N. I. C.
Garage Hardware.
Stanley Works, The, New Britain, Conn.
Garden Furniture and Ornaments.
Erkins Studios, 224 Lexington Ave., N. Y. C.
Fischer & Jirouch Co., Cleveland, O.
Galloway Terra Cotta Co., Philadelphia, Pa.
Howard Studios, 4 E. 44th St., N. Y. C.

Granite.
Rockport Granite Co., Rockport, Mass.

Hardware.

Ankyra Mfg. Co., Philadelphia, Pa.
Rixson Co., The Oscar, Chicago, Ill.
Russell & Erwin Mfg. Co., New Britain, Conn.
Soss Mfg. Co., 435 Atlantic Ave., Brooklyn, N. Y.
Stanley Works, The, New Britain, Conn.
Vonnegut Hardware Co., Indianapolis, Ind.
Heat Insulation.

Magnesia Association of America, 381 Fourth Ave., N. Y. C.

Heating Apparatus.
American District Steam Co., North Tonawanda,
N. Y.

N. Y.
Bishop-Babcock-Becker Co., Cleveland, O.
Clarage Fan Co., Kalamazoo, Mich.
Hoffman Heater Co., Lorain, O.
Houghton & Co., E. F., Philadelphia, Pa.
Jenkins Bros., N. Y. C.
Kewanee Boiler Co., Kewanee, Ill.
Pittsburgh Water Heater Co., Pittsburgh, Pa.
Taylor Instrument Co., Rochester, N. Y.

Hinges—Invisible.
Soss Mfg. Co., 435 Atlantic Ave., Brooklyn, N. Y.
Hoists—Ash Cans.
Gillis & Geoghegan, 550 West Broadway, N. Y. C.
Humidity Control.
Houghton & Co., E. F., Philadelphia, Pa.
Ice-Making Plants.
Johns-Manville Co., H. W., N. Y. C.
Insect Screens.
Watson Mfg. Co., Lamestown, N. V.

Insect Screens.
Watson Mfg. Co., Jamestown, N. Y.
Interior Decorators.
Cheney Bros., Fourth Ave. and 18th St., N. Y. C.
Duffner, F. J., Cleveland, O.
Nelson Co., W. P., New York, 209-11 W. 33d St., opp. Pennsylvania Depot; Chicago, 614 S. Michigan Ave.

igan Ave.

Interior Trim.

North Carolina Pine Association, Norfolk, Va.
Penrod Walnut & Veneer Co., Kansas City, Mo.
White Pine Bureau, St. Paul, Minn.
Iron Works-Architectural and Structural.
Hecla Iron Works, Brooklyn, N. Y.
Polachek Bronze & Iron Co., John, Long Island
City, N. Y.
Williams, Inc., Jno., 556 W. 27th St., N. Y. C.
Winslow Bros. Co., Chicago, Ill.

Kalsomine.

Kalsomine.
Fox & Co., M. Ewing, 240 E. 136th St., N. Y. C.
Lath—Metal.
Berger Mfg. Co., Canton, O.
Sykes Metal Lath & Roofing Co., Warren, O.
Trussed Concrete Steel Co., Youngstown, O.
Wheeling Corrugating Co., Wheeling, W. Va.

Lighting Equipment.

Fischer & Jirouch Co., Cleveland, O.
General Electric Co., Schenectady, N. Y.
Holophane Glass Co., 340 Madison Ave., N. Y.
Ivanhoe-Regent Works of General Electric Co., Cleveland, O.
Jefferson Glass Co., Follansbee, W. Va.
McFaddin & Co., H. G., 36 Warren St., N. Y. C.
National X-Ray Reflector Co., Chicago, Ill.
Pearlman & Co., Victor S., Chicago, Ill.
Smyser-Royer Co., Philadelphia, Pa.

Lime.

Hydrated Lime Bureau, Pittsburgh, Pa.

Kelley Island Lime & Transport Co., Cleveland, O.

Bedford Stone Club Auxiliary, Bedford, Ind. Indiana Limestone Quarrymen's Association, Bedford, Ind.

Corbin, P. & F., New Britain, Conn. Russell & Erwin Mfg. Co., New Britain, Conn.

Lumber.

Lumber.

Arkansas Soft Pine Bureau, Little Rock, Ark.
Gum Lumber Manufacturers' Association, Memphis, Tenn.
North Carolina Pine Association, Norfolk, Va.
Penrod Walnut & Veneer Co., Kansas City, Mo.
Southern Cypress Manufacturers' Association,
New Orleans, La.
White Pine Bureau, St. Paul, Minn.
Magnesia Insulation.
Magnesia Association of America, 381 Fourth Ave.,
N. Y. C.

N. Y. C.

Mantels.
Arnold & North, Inc., 123 W. 40th St., N. Y. C.
Erkins Studios, Inc., The, 227 Lexington Ave.,
N. Y. C.
Jackson Co., W. H., 2 W. 47th St., N. Y. C.
Todhunter, Arthur, 101 Park Ave., N. Y. C.

Appalachian Marble Co., Knoxville, Tenn. Erkins Studios, Inc., The, 227 Lexington Ave., N. Y. C. Paint Preservative.

Barrett Co., The, 17 Battery Pl., N. Y. C. Johns-Manville Co., H. W., N. Y. C.

Johns-Manville Co., A. Paints.
Arco Co., The, Cleveland, O.
Boston Varnish Co., Boston, Mass.
De Voe, F. W., & C. T. Raynolds, N. Y. C.
Fox & Co., M. Ewing, 240 E. 136th St., N. Y. C.
Glidden Varnish Co., Cleveland, O.
Keystone Varnish Co., Brooklyn, N. Y.
Lowe Bros. Co., Dayton, O.
Murphy Varnish Co., Newark, N. J.
O'Brien Varnish Co., South Bend, Ind.
Toch Bros., 320 Fifth Ave., N. Y. C.
Partitions.

Wilson Corp., The J. G., 8 W. 40th St., N. Y. C. Pencils—Drawing.

Dixon Crucible Co., Joseph, Jersey City, N. J.

Arkansas Soft Pine Bureau, Little Rock, Ark.

Pine—North Carolina.

North Carolina Pine Association, Norfolk, Va.

Pipe—Cast Iron.

U. S. Cast Iron Pipe & Foundry Co., Burlington,

N. J.

Pipe and Boiler Covering.
Johns-Manville Co., H. W., N. Y. C.
Magnesia Association of America, 381 Fourth Ave.,
N. Y. C.
Pipe-Joint Compound.
Johns-Manville Co., H. W., N. Y. C.

Johns-Manville Co., Moungstown, O. Pipe—Steel.
Youngstown Sheet & Tube Co., Youngstown, O. Pipe—Wrought Iron.
Youngstown Sheet & Tube Co., Youngstown, O. Pipe—Welded (National).
National Tube Co., Frick Bldg., Pittsburgh, Pa.
Youngstown Sheet & Tube Co., Youngstown, O.

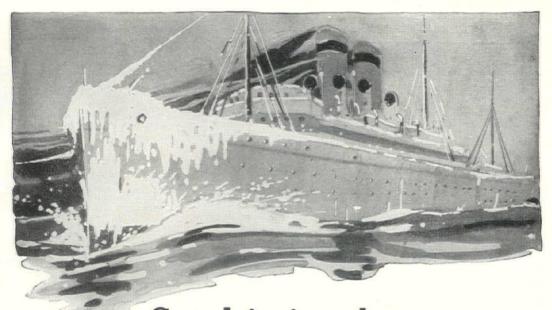
Plaster Ornaments.

Plaster Ornaments.
Decorators' Supply Co., Chicago, Ill.
Plate Warmers—Electric
Prometheus Electric Co., 237 E. 43d St., N. Y. C.
Plumbing—Brass Goods.
Glauber Brass Mfg. Co., Cleveland, O.
Plumbing Fixtures.
Glauber Brass Mfg. Co., Cleveland, O.
Johns-Manville Co., H. W., N. Y. C.
Kohler Co., Kohler, Wis.
Maddock's Sons Co., Thomas, Trenton, N. J.
Mueller Mfg. Co., H., Decatur, Ill.
Penberthy Injector Co., Detroit, Mich.
Standard Sanitary Mfg. Co., Pittsburgh, Pa.
Trageser, John, Steam Copper Works, N. Y. C.
Trenton Potteries Co., Trenton, N. J.
Wolff Mfg. Co., Chicago, and Trenton, N. J.
Portable Houses.

Portable Houses. Hodgson Co., E. F., Boston, Mass.

Power Plant Appliances.

Magnesia Association of America, 381 Fourth Ave.,
N. Y. C.



Cased in ice—but still steaming ahead!

E VERY man who has sailed the North Atlantic in winter is familiar with these conditions, but how do they affect the engine-room?

Is there any drop in efficiency there because of the zero temperature outside?

Where pipes and boilers are properly covered with "85% Magnesia" the severest outside temperatures make but little difference in engine-power.

For over a quarter of a century, "85% Magnesia" Covering has proved itself superior to every other form of heat insulation.

That is why it is used alike on the

biggest liners, where speed is the first consideration, and on countless "tramps," where the size of the coal bill often means the difference between profit and loss.

That is why in the U. S. Navy, "85% MAGNESIA" is the regulation covering ashore and afloat, for plants and ships alike.

That, also, is why in Power-plants Factories, Terminals, Skyscrapers, Hotels, Public Buildings, "85% Magnesia" is more used than all other insulators combined.

Are you using this matchless covering for the conservation of your heat?

A complete and scientific Specification, issued by the Magnesia Association of America, is sent free to anyone interested in pipe or boiler insulation.

"85% MAGNESIA"

The Universal Covering for Pipes and Boilers

MAGNESIA ASSOCIATION OF AMERICA, 381 FOURTH AVENUE, NEW YORK

EXECUTIVE COMMITTEE

George D. Crabbs, The Philip Carey Co., Cincinnati, Ohto Alvin M. Ehret, Ehret Magnesia Mfg. Co., Valley Forge, Pa.

J. R. Swift, The Franklin Mfg. Co., Franklin, Pa. R. V. Mattison, Jr., Keasbey & Mattison Co., Ambler, Pa.

A DIRECTORY FOR ARCHITECTURAL SPECIFICATIONS—Continued.

Prism Lighting. Berger Mfg. Co., Canton, O.

Pumps.
Bishop-Babcock-Becker Co., Cleveland, O.
Deming Co., Salem, O.
Standard Pump & Engine Co., Akron, O.

Radiator Valves. American District Steam Co., North Tonawanda, N. Y. Bishop-Babcock-Becker Co., Cleveland, O.

Bishop-Babcock-Becker Co., Cleveland, O Crane Co., Chicago, Ill. Detroit Lubricator Co., Detroit, Mich. Houghton & Co., E. F., Philadelphia, Pa. Jenkins Bros., N. Y. C.

Red Gum.
Gum Lumber Manufacturers' Association, Memphis, Tenn. Refrigerators.

McCray Refrigerator Co., Kendallville, Ind. Refrigeration.

ohns-Manville Co., H. W., N. Y. C.

of Cement.

Barrett Co., The, 17 Battery Pl., N. Y. C.

Johns-Manville Co., H. W., N. Y. C.

American Sheet & Tin Plate Co., Pittsburgh, Pa.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Barrett Co., The, 17 Battery Pl., N. Y. C.
Boyle, John, & Co., Inc., 112 Duane St., N. Y. C.
Carey Mig. Co., Philip, Cincinnati, O.
Johns-Manville Co., H. W., N. Y. C.
Merchant & Evans Co., Philadelphia, Pa.
Taylor Co., N. & G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.
Roofing Slate.

Roofing Slate.

Auld & Conger Co., Cleveland, O.
Chapman Slate Co., Bethlehem, Pa.
Emack Co., The John, Philadelphia, Pa.
Rising & Nelson Slate Co., West Pawlet, Vt.
Roofing Tin.

American Sheet & Tin Plate Co., Pittsburgh, Pa.

Merchant & Evans Co., Philadelphia, Pa. Taylor Co., N. & G., Philadelphia, Pa.

Taylor Co., N. & G., Philadelphia, Pa.

Safety Treads.
American Mason Safety Tread Co., Lowell, Mass.

Sash and Frame—Window.
Crittal Casement Window Co., Detroit, Mich.
Detroit Steel Products Co., Detroit, Mich.
Majestic Co., The, 425 Erie St., Huntington, Ind.
Monarch Metal Weatherstrip Co., St. Louis, Mo.
Zahner Metal Sash & Door Co., Canton, O.

Sash Cord, Chain, etc.
American Chain Co., Inc., Bridgeport, Conn.
Samson Cordage Works, Boston, Mass.
Smith & Egge Mig. Co., Bridgeport, Conn.

Sash Pulleys.

Sash Pulleys.
Russell & Erwin Mfg. Co., New Britain, Conn. Sash Steel. Lupton's Sons Co., David, Philadelphia, Pa.

Society of Beaux Arts Architects, 126 E. 75th St., N. Y. C. N. Y. C. University of Pennsylvania, The, Philadelphia, Pa.

Screens. Watson Mfg. Co., Jamestown, N. Y. Sheathing Papers. Johns-Manville Co., H. W., N. Y. C.

Sheet Metal Work.

Badger, E. B., & Sons Co., Boston, Mass.
Koven & Bro., L. O., 50 Cliff St., N. Y. C.
Stark Rolling Mill Co., Canton, O.

Shingle Stains. Barrett Co., The, 17 Battery Pl., N. Y. C. Cabot, Inc., Samuel, 141 Milk St., Boston, Mass.

Shingles.
Asphalt Ready Roofing Co., 9 Church St., N. Y. C. Barrett Co., The, 17 Battery Pl., N. Y. C. Hammer Lumber Co., Philadelphia, Pa. Johns-Manville Co., H. W., N. Y. C. Keasbey & Mattison Co., Ambler, Pa. Merchant & Evans Co., Philadelphia, Pa. Standard Stained Shingle Co., Tonawanda, N. Y. Wheeling Corrugating Co., Wheeling, W. Va. Shoes—Sliding Furniture and Piano. Onward Mig. Co., Menasha, Wis. Sidewalk Lights.
Berger Mig. Co., Canton, O. Shingles.

Slate Blackboards Do Endure



The City of New York had a School Building which had outlived its usefulness, so they tore it down-as they do in New York -BUT the slate blackboards taken out of it are to be used

Slate Blackboards Do Endu

Slate Blackboards Do Endu

Slate Blackboards The City of New York School Building which halived its usefulness, so the it down—as they do in New —BUT the slate black taken out of it are to be again.

Natural Slate Blackboard C Sales Office, Pen Argyl, Penn.

MILLS AT SLATINGTON, WIND GAP, PEN ARGYL AND BANGO Natural Slate Blackboard Co.

MILLS AT SLATINGTON, WIND GAP, PEN ARGYL AND BANGOR





White Enamel

Go back and look at that Kyanize White Enamel work done three years ago.

What a sense of satisfaction to see it looking almost as good as the day it was finished.

The merit in Kyanize White Enamel lies not only in its covering twice the area as most White Enamels, but also in its durability and its immunity to peeling, cracking, blistering or checking.

It can be used for inside or outside work on wood, metal or plaster and it is unaffected by weather or climate.



Made in either gloss or eggshell, both drying with a hard, porcelainlike surface.

> For further particulars regarding Kyanize products, sée Sweet's Catalog, Valuable Specification Booklet and sample enameled panels on request.

BOSTON VARNISH COMPANY

Fine Varnishes and Enamels

Everett Station, Boston, U. S. A.

Chicago Warehouse and Office 519 W. Twelfth St. San Francisco Warehouse and Office 311 California St.

A DIRECTORY FOR ARCHITECTURAL SPECIFICATIONS-Continued.

Chency Bros., Fourth Ave. and 18th St., N. Y. C. Slate Blackboards. Natural Slate Blackboard Co., The, Pen Argyl, Pa.

Slate Roofing.

Auld & Conger Co., Cleveland, O.
Chapman Slate Co., Bethlehem, Pa.
Rising & Nelson Slate Co., West Pawlet, Vt.

Sound Deadeners.

Barrett Co., The, 17 Battery Pl., N. Y. C.
Cabot, Inc., Samuel, 144 Milk St., Boston, Mass.
Johns-Manville Co., H. W., N. Y. C.

Stains ins. Glidden Varnish Co., Cleveland, O. Merchant & Evans Co., Philadelphia, Pa. O'Brien Varnish Co., South Bend, Ind. Pratt & Lambert Inc., Buffalo, N. Y.

Steel Form Construction. Concrete Engineering Co., Omaha, Neb. Partition. El Partition.

Lupton's Sons Co., David, Philadelphia, Pa.

re Front Construction.

Kawneer Mfg. Co., Niles, Mich.

Sun Dials.
Erkins Studios, 224 Lexington Ave., N. Y. C. Tanks.

Tanks.

Badger, E. B., & Sons Co., Boston, Mass.
Koven & Bro., L. O., 50 Cliff St., N. Y. C.

Telephones—Intercommunicating.
Western Electric Co., N. Y. C.

Telephone Service.
New York Telephone Co., 15 Dey St., N. Y. C.

Temperature Control.
Houghton & Co., E. F., Philadelphia, Pa.

Terra Cotta.
Atlantic Terra Cotta Co., 1170 Broadway, N. Y. C.
Federal Terra Cotta Co., Trinity Bldg., N. Y. C.
Galloway Terra Cotta Co., Philadelphia, Pa.

Thermostats.

Thermostats. Houghton & Co., E. F., Philadelphia, Pa.

Plate. American Sheet & Tin Plate Co., Pittsburgh, Pa. Merchant & Evans Co., Philadelphia, Pa. Taylor Co., N. & G., Philadelphia, Pa. Wheeling Corrugating Co., Wheeling, W. Va.

Tracing Cloth.

National Tracing Cloth Co., Saylesville, R. I.

Trees, Shrubs, etc.
Andorra Nurseries, Philadelphia, Pa.
Bobbink & Atkins, Rutherford, N. J.
Upholstery Fabrics.
Cheney Bros., Fourth Ave. and 18th St., N. Y. C.

Ness.
Bishop-Babcock-Becker Co., Cleveland, O.
Detroit Lubricator Co., Detroit, Mich.
Houghton & Co., E. F., Philadelphia, Pa.
Jenkins Bros., 80 White St., N. Y. C.
Kennedy Valve Mfg. Co., Elmira, N. Y.

Varnish.
Arco Co., The, Cleveland, O.
Billings-Chapin Co., The, Cleveland, O.
Boston Varnish Co., Boston, Mass.
De Voe, F. W., & C. T. Raynolds, N. Y. C.

Glidden Varnish Co., Cleveland, O.
Keystone Varnish Co., Brooklyn, N. Y.
Lowe Bros. Co., Dayton, O.
Murphy Varnish Co., Newark, N. J.
O'Brien Varnish Co., South Bend, Ind.
Pratt & Lambert, Inc., Buffalo, N. Y.
Smith & Co., Edward, Long Island City, N. Y.
Venetian Blinds.
Wilson Corp., The L. G., 8 W. 40th St. N. Y. C.

Wilson Corp., The J. G., 8 W. 40th St., N. Y. C. Ventilators.

ntilators.
American Blower Co., Detroit, Mich.
Globe Ventilator Co., Troy, N. Y.
Merchant & Evans Co., Philadelphia, Pa.
Ohio Blower Co., Cleveland, O.
Royal Ventilator Co., Philadelphia, Pa.

Ventilating Fans. American Blower Co., Detroit, Mich. Clarage Fan Co., Kalamazoo, Mich. Ohio Blower Co., Cleveland, O.

Vitrolite.
Vitrolite Co., The, Chicago, Ill.
Wall Board.

Wall Board.
Upson Co., Lockport, N. Y.
Wall and Ceiling Finishes.
Fox & Co., M. Ewing, N. Y. C.
Glidden Varnish Co., Cleveland, O.
Keystone Varnish Co., Brooklyn, N. Y.
O'Brien Varnish Co., South Bend, Ind.
Pratt & Lambert, Inc., Buffalo, N. Y.
Standard Oil Cloth Co., 320 Broadway, N. Y. C.

Standard Oil Cloth Co., 320 Broadway, N. Y. C. Wardrobes.
Wilson Corp., The J. G., 8 W. 40th St., N. Y. C. Waterproof Compound.
Anti-Hydro Waterproofing Co., Newark, N. J. Arco Co., The, Cleveland, O. Barrett Co., The, I? Battery Pl., N. Y. C. Carey Co., The Philip, Cincinnati, O. Ceresit Waterproofing Co., Chicago, Ill. Johns-Manville Co., H. W., N. Y. C. Sandusky Cement Co., Cleveland, O. Sonneborn Sons, Inc., L., 263 Pearl St., N. Y. C. Toch Bros., 320 Fifth Ave., N. Y. C. Wadsworth-Howland Co., Inc., Boston, Mass. Water Supply.

Wadsworth-Howland Co., Inc., Boston, Mass.
Water Supply.
Bishop-Babcock-Becker Co., Cleveland, O.
Deming Co., Salem, O.
Standard Pump & Engine Co., Akron, O.
Weatherstrips—Metal.
Monarch Metal Weatherstrip Co., St. Louis, Mo.
White Pine.
White Pine.
White Pine.
Badger, E. B., & Sons Co., Boston, Mass.
Window and Door Screens.
Watson Mig. Co., Jamestown, N. Y.
Windows.

Windows.

Detroit Steel Products Co., Detroit, Mich.
Winslow Bros. Co., Chicago, Ill.

American Steel & Wire Co., Chicago, Ill. Woods.

Arkansas Soft Pine Bureau, Little Rock, Ark. Gum Lumber Manufacturers' Association, Mem-

Gum Lumber Manufacturers Association, Penn.
North Carolina Pine Association, Norfolk, Va.
Northern Hemlock and Hardwood Manufacturers'
Association, Wausau, Wis.
Penrod Lumber & Veneer Co., Kansas City, Mo.
White Pine Bureau, St. Paul, Minn.



TUDOR STONE (Roofing Slate)

Not merely rough heavy slate, for neither roughness nor heaviness is essential to secure effectiveness. When ruggedness is wanted, however, Tudor Stone is without limitation.

Let us explain its availability, in restrained form, for Italian, Colonial and Renaissance work.

RISING & NELSON SLATE CO.

Architects' Service Department, 47 West 34th St., New York City Main Office and Quarries. West Pawlet, Vermont Commercial Branches-Boston, Chicago and New York



B E your white lead and oil mixture ever so pure, it is no more fit to be used as a protective covering than is pure gold suitable for a watch case.

Copper and silver are added to gold, making it an alloy, that gives it wearing qualities.

To white lead and oil should be added just the right proportions of zinc and an inert closing up material.

The lead has the covering qualities—the zinc the hard protective properties. The inert material closes up and binds together in a complete, almost homogeneous mass the particles of the zinc and lead.

But of vital importance is the right combining of the right qualities; and by thorough machine grinding the complete oil incorporating of each material —a thing utterly impossible with the stick-mix method.

Over fifty years of experience goes into every mix and make of our paint. What more need be said. Avail yourself of our Service Department. Its main office is at 101 Park Avenue, New York.

The Lowe Brothers Company

Paint Makers

Varnish Makers

Dayton, Ohio



One of the severe tests to which our outdoor white has been subjected is on pergolas. This pergola was built by Hartmann-Sanders Co.



No. 105. Base triangular, 2/8" diameter. Base may be made also 2' in diameter. 8'9" high to bottom of globe.

SMYSER-ROYER CO.

Architectural & Ornamental Metal Work

EXTERIOR LIGHTING FIXTURES

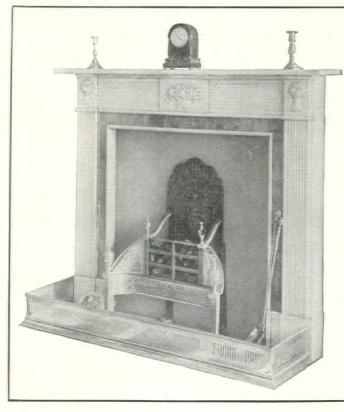
A SPECIALTY

More than 300 models listed in our several catalogues, afford a wide range for selection of design and facilitate quick delivery. We also execute with precision and dispatch, work from special designs.

Write for Descriptive Literature

WORKS: YORK, PA.

PHILA. OFFICE & STUDIO: 1225 RACE ST.



ARTHUR TODHUNTER

101 PARK AVENUE NEW YORK CITY

English
Marble
Mantels

and

Appropriate Fireplace Furnishings

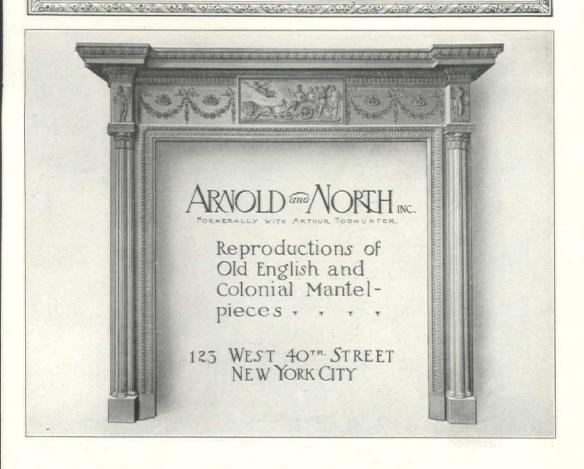
A NEW 300 PAGE CATALOG

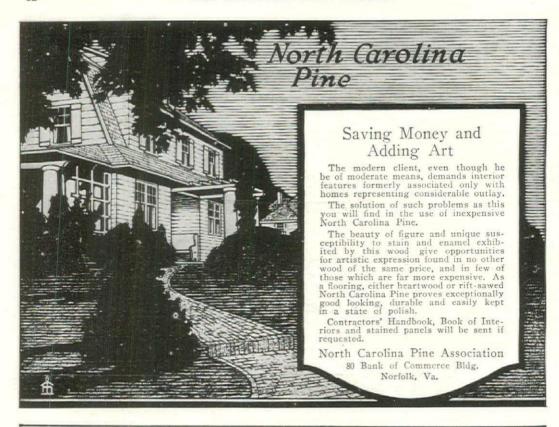
We have just published a 300 page catalog on plaster ornaments which we will send to ARCHITECTS FREE

DECORATORS SUPPLY CO.

Archer Avenue and Leo Street Chicago

Illinois





HECLA IRON WORKS

ESTABLISHED 1876

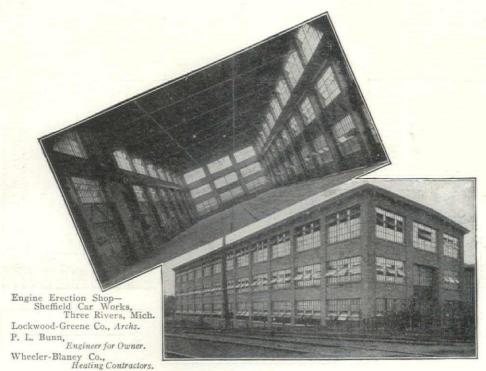
BRONZE AND IRON

BROOKLYN, NEW YORK CITY, N. Y.

The Heating Apparatus for this building was furnished by the

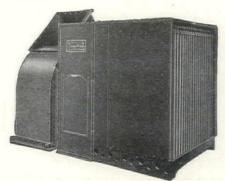
CARAGE FAN OMPANY.

KALAMAZOO-MICHIGAN-U.S.A. NEW YORK CLEVELAND CHICAGO



The Best Solution

to the heating problem in the modern type of industrial building lies in the forced circulation of warm air. The heat can be distributed to all parts of the building easily. A slight pressure within the building prevents leakage in at the windows. The control is centralized. It is not necessary to maintain high temperatures all night in order to have satisfactory working conditions in the early morning. It is not necessary to maintain an extremely high temperature at the ceiling line in order to have a comfortable working temperature at the floor line. The heat is placed where it is needed.



KALAMAZOO Fan Systems for Heating

not only heat and ventilate in the Winter, but cool your plant and provide better working conditions in the Summer.

The first cost is lower; the operating cost is lower.

Our Engineers will be glad to assist with your plans.

IMPORTANT NOTICE to LUMBER USERS:

THE SOUTHERN CYPRESS MANUFACTURERS' ASSOCIATION HEREBY INFORMS YOU THAT ALL CYPRESS NOWAND HEREAFTER SHIPPED BY MILLS WHICH ARE MEMBERS OF THE ASSOCIATION WILL BE

IDENTIFIED BY THIS MARK



This registered trade-mark will be, henceforth,

YOUR INSURANCE POLICY OF QUALITY.

It will appear stamped (mechanically and ineradicably) on one end, or both ends, of EVERY board and timber of

CYPRESS "THE WOOD ETERNAL."

CYPRESS FLOORING, SIDING, MOULDING AND SHINGLES, which come in bundles, will bear the same mark on EVERY BUNDLE.

The legal right to apply this epoch-making symbol of strict RESPONSIBILITY IN LUMBER MAKING AND SELLING

is, of course, restricted to those Cypress mills which, by their membership in the Southern Cypress Manufacturers' Association, attest their devotion to its Principles of Service to the Consumer and their foresighted appreciation of its open and progressive educational methods.

Only mills cutting "Tide-water" Cypress (within about 200 miles of the coast) are eligible for membership. (Cypress grown elsewhere has less of the "Eternal" quality.)

Only mills which subscribe to the Association's standard of scrupulous care in methods of MANUFACTURE, INTEGRITY OF GRADING and ACCURACY OF COUNT can belong to the Association. These responsible "A-1" mills the Association now licenses to

CERTIFY THEIR CYPRESS by applying the registered trade-mark with their identifying number inserted.



BY THIS MARK YOU KNOW THAT IT'S CYPRESS, "THE WOOD ETERNAL," AND WORTHY OF YOUR FAITH. IT IS WELL TO INSIST ON SEEING THIS TRADE-MARK ON EVERY BOARD OFFERED AS "CYPRESS."



TRADE MARK REG. U.S. PAT. OFFICE

Let our ARCHITECTS' HELPS DEPARTMENT help YOU MORE. Our entire resources are at your service with Reliable Counsel.

Southern Cypress Manufacturers' Association

1211 HIBERNIA BANK BLDG., NEW ORLEANS, LA., or 1211 HEARD NATIONAL BANK BLDG., JACKSONVILLE, FLA.

INSIST ON TRADE-MARKED CYPRESS AT YOUR LOCAL LUMBER DEALER'S. IF HE HASN'T IT, LET US KNOW.



when your customer is convinced of its purity. No doubting DEVOE purity—the guarantee formula is on every can."

(Signed) Every Dealer

DEVOE

The oldest manufacturing concern in the United States Founded in New York in 1754

F.W. DEVOE & C.T.RAYNOLDS ONEW YORK DEVOE & RAYNOLDS CO. CHICAGO





Thorough Heat Distribution

is assured if your clients use a

VACUUM OR HEATING SYSTEM

How often have you seen cases where some radiators were hot and others in the same building ice cold? Never-if it was a Reliable Heating System.

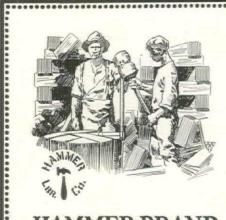
With Reliable Air Line and Return Line Systems the radiators are kept free from air by means of an automatic-working vacuum pump, which also pulls steam into the radi-The Reliable Automatic Radiator Valves permit the withdrawal of the air as

fast as it accumulates, but absolutely prevent the loss or escape of steam. Every radiator is forced to do its full duty; and there can be no short circuits.

The three different Reliable Systems—Air Line, Return Line and Vacu-Vapor—cover every steam heating requirement and are equally efficient in any style of building. You provide your clients with most economical and satisfactory heating service when you specify Reliable Equipment.

Our new complete catalogue "A R" will prove a valuable addition to your files. Write for your copy, today.

THE BISHOP-BABCOCK-BECKER CO. Cleveland, O.



HAMMER BRAND Hand-Made Heart Cypress

The Shingles of our Grandfathers Write for Booklet

The Hammer Lumber Co.

LIBERTY BUILDING. PHILADELPHIA
Member Philadelphia Wholesale Lumber Dealers' Association



STAINED SHINGLES

STAINED SHINGLES

17 Grades

16, 18, 24-Inch

30 Colors

Save repair and repainting expense. Give unusual beauty. Cost less than staining on the job. Only selected cedar shingles. No waste. Preserved in Creosote, stained any color by our process. Write for book of "CREO-DIPT" homes and sample colors on wood.

STANDARD STAINED SHINGLE 1024 Oliver St. North Tonawanda, N. Y. FACTORY IN CHICAGO FOR WEST " MADE IN AMERICA"

RED GUM

(AMERICA'S FINEST CABINET WOOD)

IS THE "LIFE-SAVER"

of the high-class trim and furniture interests in these disturbing days. GUM'S **only competitors** as a pre-eminent trim and furniture wood are the woods formerly imported, but **now impossible to get** at advantageous prices.

It is to the credit of American architects, designers, contractors and investors that they now ACKNOWLEDGE THE ADVANTAGE TO THEM of having available (and of RELYING on) so wonderfully beautiful and dependable a trim and furniture wood as American GUM.

It is to the credit of GUM lumber and veneer manufacturers that they are **not** taking unfair advantage of THE BOOM IN GUM to exact unreasonable prices. **On a parity of excellence** (in every sense) with the finest foreign woods, Gum will show a healthy saving to the investor on a small job, and a tremendous margin on a large one.

RED GUM OR SAP GUM at present prices is THE ONE BIG BEST BUY in the whole interior trim and furniture world, for architect, designer, maker, seller and consumer.

And they all know it.

Write us for booklets and samples.

Gum Lumber Manufacturers' Ass'n

1303 BANK OF COMMERCE BUILDING

MEMPHIS, TENN.

Second Annual Architectural Competition

of the

White Pine Monograph Series

A HOUSE TO COST \$12,500

(Outside Finish to be of White Pine)

PRIZES AND MENTIONS

Premiated Design will receive - - - \$750.00

Design placed second will receive - - - - 400.00

Design placed third will receive - - - 250.00

Design placed fourth will receive - - - 100.00

Six Mentions

All Architects and Architectural Draftsmen are cordially invited to enter this competition.

Competition closes at 5 p. m., Tuesday, May 1, 1917

For complete program see the February Number of The White Pine Series of Architectural Monographs

If you are not receiving the Monographs and feel interested in having them, kindly write Mr. Russell F. Whitehead, 132 Madison Avenue, New York City, who will be pleased to send you the February Number and all subsequent issues.

> WHITE PINE BUREAU, 1332 Merchants Bank Building, St. Paul, Minn.

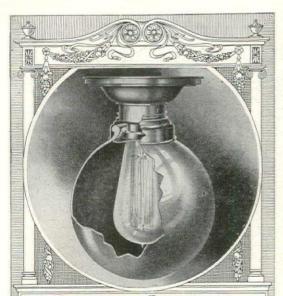
Representing
The Northern Pine Manufacturers'
Association of Minnesota, Wisconsin
and Michigan, and The Associated
White Pine Manufacturers of Idaho



burg." Tour clients will appreciate your good offices in specifying equipment capable of such service. And we will stand sponsor for dependable "just-so" results.

The catalogue is interesting. It will tell you of something to recommend to your clients.

PITTSBURG WATER HEATER CO. PITTSBURG PENNSYLVANIA



For COMMERCIAL LIGHTING Specify "MEFCO" SCREWLESS HOLDERS

The use of MEFCO devices assures greater safety in lighting fixtures, as they eliminate liability of injury or damage from falling glassware.

They also reduce maintenance costs for cleaning and breakage to a minimum.

Glassware is supported on a flanged plate inside, not at the lip outside. There are no screws to cause breakage or loosen and permit glassware to fall.

The MEFCO is instantaneous in operation and cannot be attached incorrectly or carelessly.

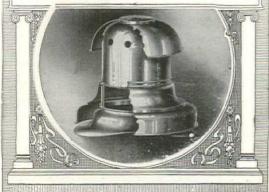
Ideal for use in schools, public buildings, and all installations where safety and cost of maintenance are of first importance.

The MEFCO Ceiling Fixture is ideal for use in hallways and as porch light. It is dust and insect proof. Send for descriptive booklet. Samples furnished for demonstration.

H. G. McFADDIN & CO.

36 WARREN STREET

NEW YORK



CALCIMINE

INFORMATION

CALCIMINES are glutinous water colors made for tinting and decorating the ceilings and walls of cottages, bungalows, theaters, hotels, offices, apartments, schools, asylums and churches.

CALCIMINES adhere well to plaster, sand-finish, wood, wallboard, canvas, paper and to oilpaint and varnish.

paper and to oilpaint and varnish. CALCIMINES come in all colors, cover well with one coat, dry quickly, are inexpensive and perfectly sanitary. CALCIMINES of the right sort produce beautiful effects at a very low cost and will not rub off, chip nor fade. They are ideal for ceiling decoration. The best kind of Calcimine is the one called

"MURALITE"

Specify it and make sure See "Sweet's" or write us for advice

M. EWING FOX CO.

Watercolor Manufacturers

NEW YORK

CHICAGO



not porous

John Dewar, in his treatise "Exterior Wood Painting," says the "one great fault of white lead and linseed oil" is "liability to chalk." Chalking means porousness, and is due to white lead coarseness.

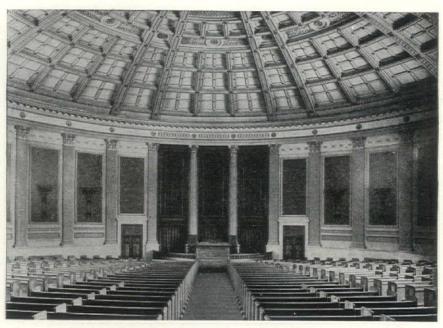
ZINOLIN

the "Arnold-ized" zinc

is 85% Zinc Oxide, which Mr. Dewar states "is one of the whitest, finest and most valuable pigments." In ZINOLIN, under the Arnold secret process, the only faults of the single use of Zinc Oxide—a tendency to brittleness and poor covering—are entirely overcome. A water-tight as well as a wonderfully elastic surface is given. The reasons are most interesting. Write us about it.

KEYSTONE VARNISH CO.

Makers of justly famous KEVSTONA, the original washable wall paint 1020 Keystona Building, Brooklyn, N. Y.



THE FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, NEW YORK Gordon & Madden and Wm. G. Kaelber, Architects.

All interior decorations and furnishings in the First Church of Christ, Scientist, Rochester, N. Y., were executed by the following firms under the direction of

F. J. DUFFNER

Designer and Builder of Church Interiors

3608 Euclid Avenue Cleveland, Ohio

ARCHITECTURAL PLASTERING CO., Inc.
Ornamental Plastering and Cement Work

DITTMAR FURNITURE COMPANY Woodwork and Seating

The O. S. KIMBERLY COMPANY, Inc. Stained Glass Windows

RAMBUSCH DECORATING COMPANY
Wall Decorations

STERLING BRONZE COMPANY Lighting Fixtures and Hardware

ARNOLD, CONSTABLE & COMPANY, Inc.

WHEELER-GREEN ELECTRIC COMPANY
Electrical Engineers

Get the Velvet

Get satisfaction plus. Get it for yourself by getting it for your clients. Get Glidden. Get Glidden White Enamel. Get Glidden VELVET White Enamel and you'll get that rich, velvety effect you like so well. You'll get the rubbed effect without rubbing. You'll get what you want, with economy thrown in.

When you specify enamel, Get the Velvet.

The Glidden Varnish Company, Berea Road, Cleveland, Ohio.

Gentlemen:

Please send me a panel showing the results I car get by using your Velvet White Enamel.

Name .

Addres

Town State

Also send one of your specification cards.



OW you can get a durable white enamel rubbed effect without the expense of rubbing.

Now you can satisfy your artistic standards and save your clients' money-

-with Glidden Velvet White Enamel.

The expense of many undercoats, enamel coats, rubbing and all the necessary steps in white enamel work, often makes this much-desired finish prohibitive. You cannot be satisfied with a harsh, white finish left in the gloss. You are often pressed for time.

"Velvet White" bridges over these difficulties. It provides a firm under-film and at the same time dries with a smooth, velvety finish that is equal in every way to the best rubbed finish. It saves the expense of rubbing and builds up a thoroughly satisfactory coating by the shortest possible route.

It's a four-coat job with a seven-coat result.

Glidden Velvet White Enamel produces a surface that's both non-porous and waterproof. One that stands repeated washing and scrubbing. It fully meets the rigid requirements of hospitals and sanitariums.

Send for a "Prove it" panel.

THE GLIDDEN VARNISH COMPANY

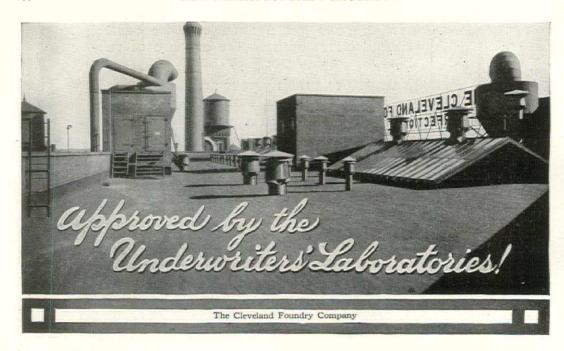
Manufacturers of Glidden Architectural Finishes (a complete line of varnishes, enamels, stains, etc.) Cleveland, Ohio

Berea Road

Factories: Cleveland—Toronto

New York-Chicago-London





FOR REAL PROTECTION SPECIFY

Carey Roofing

AREY ROOFS combine the enduring qualities of asbestos and asphalt. They give maximum protection alike from fire and from weather. They are practically immune to the troubles that make the ordinary roof a care and expense to the owner—a reproach to the architect and builder. The CAREY Specifications provide for every requirement.

For plain roof surfaces, both wood and concrete, Carey Flexible Cement Roofing, factory-built, has proved its value for more than thirty years. For irregular surfaces, broken with many skylights, ventilators, hatches, etc., Carey Roofing, Built-on-the-Job, offers a degree of economical service not obtainable in any other roofing.

Specify Carey Roofing according to the Carey Book of Specifications and backed up by the Carey Guarantee.

THE PHILIP CAREY COMPANY

General Offices: Lockland, Cincinnati, Ohio

50 Branches and Distributors



Put An End to Ends and Eliminate the Waste Basket

SCRAPS" over undue expenditures for tracing cloth are frequently the outcome of scraps in the waste basket. Put an end to both—use

National TRACING CLOTH
No waste ends

Tracing Cloth, in flat sheets, cut to size and ready for instant use means no waste ends; no waste of draughtsmen's time in fumbling, marking and cutting the cloth; no waste of time in referring to drawings on file, each number or title being in line for quick reference as the result of uniform size.

The exceptional uniformity of texture and transparency of National Tracing Cloth is another time saver. Order and dispatch prevail where National is used.

Order your sample today. Sent gratis with dispatch.

ADVANTAGES

* *

Quality of the Imported cloth at Domestic prices.

All sheets printed at our factory with hard black glossy ink that will not smear.

Sold in all principal cities.

Cut to any size desired.

Absolutely free from Pin Holes.

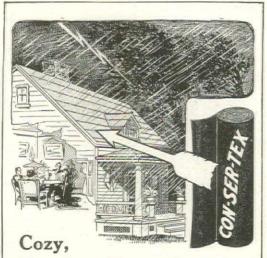
Heavy enough to insure service, light enough to facilitate easy tracing.

> Marked Transparency.

May be had in rolls if desired.

NATIONAL TRACING CLOTH CO. SAYLESVILLE - - RHODE ISLAND

New York Office - - - - - - 72 Leonard Street



CON-SER-TEX

CANVAS ROOFING

eliminates a noisy roof.

It is a specially prepared roofing fabric which assures you of the greatest satisfaction.

It is durable, artistic, sound-proof and is not affected by climatic conditions. Once it is put on you can be sure there will be no further roofing expenses. No leaks, breaks nor splits. It will not crack, peel nor blister. It is the ideal roofing material and is being specified by many leading architects.

It is economical to put on and permits of a great saving in the cost of building. Every Architect should know of the exclusive advantages of CON-SER-TEX before finally deciding the roofing problem.

Send for new illustrated booklet "Roofing Facts and Figures"

William L. Barrell Company
8 Thomas Street New York

Chicago Distributor
Geo. B. Carpenter & Co., 430-40 Wells St.
California Distributors
Waterhouse & Price Co., Los Angeles
The Pacific Building Material Co., San Francisco



The Washable Flat Wall Finish

Liquid Velvet enhances and perpetuates your best work—its use insures Walls and Ceilings of lasting beauty.

Manufactured by American Varnish Makers, whose products have been looked upon as standard for nearly half a century.

Architects and Specification men can secure a portfolio of valuable data by addressing

THE O'BRIEN VARNISH CO. 8 S. Johnson St. South Bend, Ind.

ORIGINATORS SASH CHAIN



The Standard for over 35 years Many imitators, no equal

Used by the United States Government over 30 years

Capacity of chain plant 35 miles per day

The Smith & Egge Mfg. Co. BRIDGEPORT, CONN.



Not Specified—but It's There!

EVERY architect and engineer writes his specifications so as to secure the best cement floors. But when one of a dozen little circumstances will offset the intention, the result is a floor that wears rapidly on the surface—a soft, crumbling floor that is forever dusting. Cement dust is germ-bearing, dirt-accumulating, destructive to health, a constant menace to machinery and merchandise, an actual money loss of many thousands of dollars annually.

The Remedy is ARCO VITROGRAIN

Arco Vitrograin is a liquid chemical treatment. It is brushed onto cement floors—and by combining with the free lime in the floor reduces porosity, knitting the loose particles into a rock-hard, wear-proof and absolutely dust-free surface.

Many successful practicing architects are now specifying that Arco Vitrograin be applied to their floors before being put into service, thus assuring their clients complete removal of the DUST nuisance. Protection to health, machinery and merchandise, and life-insurance to the cement floor itself are all provided by this timely use of Arco Vitrograin.

ARCO FLOORCOTE, a paint-film product supplied in various colors, is recommended for use where a decorative as well as dustproof coating is desired.

ARCO SOLIDIZER, a metallic hardener added to the topping at the time the floor is laid, is the ideal treatment for wearproofing floors of heavy manufactories, warehouses, loading docks, shipping rooms, foundries, etc.

Send us full information regarding your floor problem and we will reply in detail.



243 WISE BUILDING THE ARCO COMPANY

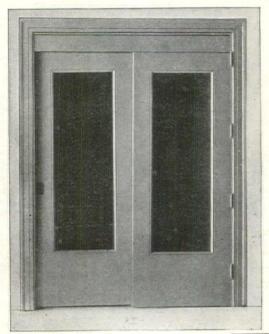
CLEVELAND OHIO

Founded 1880

Paints, Varnishes and Enamels

THORP ELEVATOR DOORS

(COMBINATION SLIDE AND SWINGING)



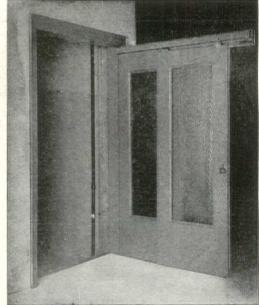
The Thorp Combination Slide and Swing Door is adapted to elevators used for both passengers and freight, and for service in Flat Buildings, Compartment Houses, Hospitals, Hotels, Small Office Buildings, and any building where a combination elevator is to be used.

The track is carried on an arm that swings with the hinged door, thus carrying the Slide Door with it when operated. This is the simplest and most practicable method of operating this type of a door, and experience has shown that it is by far more economical than any of the types of doors operated with the track stationary.

This door can be adapted to almost any condition met with in elevator-ways. Types shown are typical of the installations most commonly used. These may be hung on any type of track. The ball-bearing type is preferred for Hospitals, Asylums, etc., but the Trolley type is the one most used for service, accommodation and freight-elevator doors.

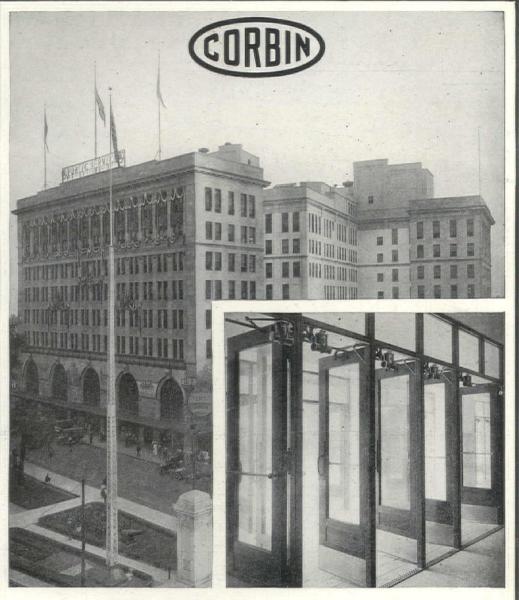
The thrust bolt at the end of and bottom of the Swing Door, and the guide bolt for the Sliding Door are furnished with the door. The other hardware is also furnished with the door when requested.

The Thorp Reference Book of Fireproof Doors will be sent to Architects upon request.



THORP FIREPROOF DOOR COMPANY

MINNEAPOLIS, MINN.



THE PARK PLACE TERMINAL

NEWARK, N. J.

GEORGE B POST & Sons, Architects

Hedden Construction Co, Contractors

Corbin Locks and Hardware Used Throughout.

One of the main entrances is shown with Corbin door pulls, guard bars, bronze butts and door checks This is a typical equipment, and is similar to that used in the Grand Central Station and Pennsylvania Terminal in New York and the Union Stations in Boston, Washington and Pittsburgh The Corbin door check has become recognized by engineers and architects as the one to use, when severe service is required. Full description will be sent upon request

P. & F. CORBIN
The American Hardware Corporation, Successor NEW BRITAIN, CONN. CHICAGO

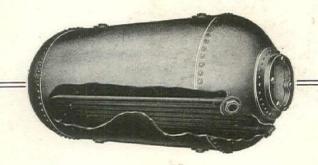
NEW YORK

PHILADELPHIA



BADGER QUALITY





Our Faith in the future of Badger Copper Boilers is the basis of your absolute security in making your specifications read definitely "Badger." The quality of our products and our methods of doing business have always been determined by a policy that reckons with the future. We build our boilers to last—we build our business according to the same plan. Specify Badger.



E.B. Badger & Sons Co. Boston, U.S.A.





COVER—Gathedral at Ronda, Spain. Water Color by R. Kennon Perry	Page
THE FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y.: Gordon & Madden and William G. Kaelber, Architects By I. T. Frary	195
ENGLISH ARCHITECTURAL DECORATION. Part II. Text and Measured	
Drawings by Albert E. Bullock	211
RECENT HOSPITALS BY KENDALL, TAYLOR & CO.	231
PORTFOLIO OF CURRENT ARCHITECTURE	255
THE ARCHITECT'S LIBRARY: Books on Colonial Architecture. Part V.	
Furniture and Furnishings By Richard F. Bach	279
NOTES AND COMMENTS	286
Editor: MICHAEL A. MIKKELSEN. Advertising Manager: AUSTIN L. BLACK Yearly Subscription—United States \$3.00 Entered May 22, 1902, as Second Copyright 1917 by The Arch	
-Foreign \$4,00-Single Copies 35 cents Class Matter, at New York, N.Y. Record Company-All Rights F	leserved

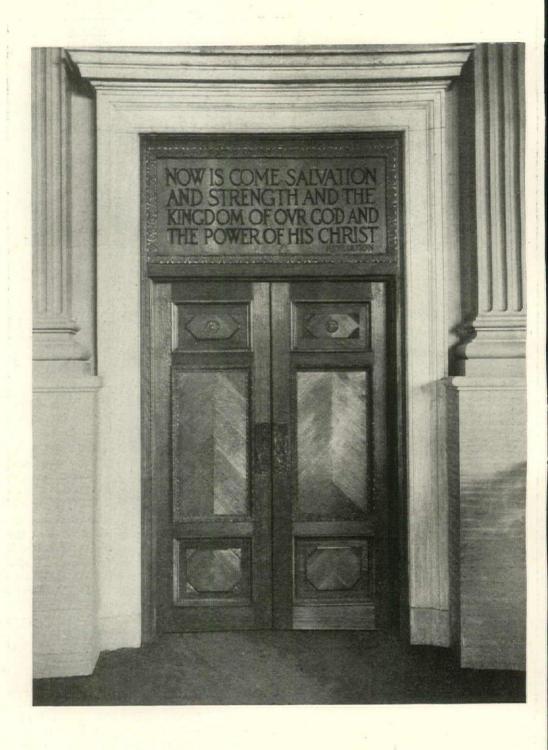
PUBLISHED MONTHLY BY

THE ARCHITECTURAL REGORD COMPANY

115-119 WEST FORTIETH STREET, NEW YORK

F. T. MILLER, Pres,

W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas, E. S. DODGE, Vice-Pres.



DOORWAY TO SUNDAY SCHOOL CORRIDOR—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.

ARCHITECTVRAL RECORD

VOLVME XLI



NVMBER III

MARCH, 1917

FIRST CHVRCH OF CHRIST, SCIENTIST ROCHESTER, NEW YORK

CORDON & MADDEN AND WM. C. KAELBER, ARCHITECTS

By IT. FRARY

URING the last few years the Church of Christ, Scientist, has made a most phenomenal growth and has built a great number of church edifices throughout the country. From the standpoint of the architect, one of the interesting features of this growth has been that, almost without exception, the buildings have been designed on classic The Gothic and other so-called Christian styles, which accord so admirably with the service of the Catholic, Episcopalian and other ritualistic forms of worship, seem too formal and severe for the simple service of the Church of Christ, Scientist. The fact that its service is concerned with the interchange of ideas and thoughts rather than with the impressions of a liturgical worship makes essential an auditorium in which every seat is so placed as to enable the occupant to see and hear, and these conditions are most readily secured by following the classic styles.

The exteriors of many of the churches are very beautiful, but there is one criti-

cism of the interiors which applies to nearly all, which is that they are cold, lack sympathy; in other words, they are devoid of color. Correct though they may be in design, in proportion and detail, they are, so to speak, anæmic in effect, and in strange contrast to the warmth and vitality of the religion which is professed within their colorless walls. This asceticism is doubtless due to a revulsion against the chromatic displays which untutored decorators have perpetrated upon the walls and windows of so many churches. The renunciation of color in toto is the natural and logical result.

In the case of the First Church of Christ, Scientist, Rochester, New York, designed by Gordon and Madden and Wm. G. Kaelber, this prevailing weakness was recognized; and building committee, architects and decorator worked in accord to the end that there should be a wealth of color dominating the interior, but of a quality and character that should be felt without being too evident, that

should produce a sense of warmth and comfort without in any way suggesting

garishness or unrest.

The exterior is very simple in design, little use having been made of ornamental detail. Its effect is largely dependent upon this very simplicity of treatment and the judicious use of grey brick of

good color and texture.

A broad approach in front leads up to a raised terrace, around which is carried a stone balustrade, terminating on either side of the terrace steps in stone pylons surmounted by bronze lighting fixtures of unusual and interesting design. Four monolithic columns distinguish the entrance portico, the rear wall of which is pierced by five doorways, above which are square openings filled with pierced stone grilles. These doorways open into a vestibule through which one passes into the foyer. Immediately the atmosphere of warmth is apparent. Although the walls and floor are treated in tones of grey, the tints are warm and cheerful, not the kind that chills and depresses. Furthermore, touches of gold and soft color have been introduced in the lighting fixtures, the hardware, the cushions of the curved benches which stand by the stair walls, and in the balusters of the stair Tail.

The floor is covered with a high-pile carpet, surrounded by a border of Tennessee marble raised above the cement floor, just the height of the carpet pile. The room base is also of marble. dominant feature of the fover is its unusual plan, the axis being a curve following the outer wall of the circular auditorium.

The auditorium, which is one hundred feet in diameter, is covered by a flattened dome, the surface of which is elaborately coffered, and has for its central feature a gilded sunburst. The disposition of the ceiling ribs is such as to produce a complex but well graduated scheme of coffering, the lines of which are well calculated to carry the attention up to the central point of interest and to give the entire dome a sense of soaring buovancy.

The walls are broken up into vertical panels by large Corinthian pilasters arranged equidistantly around the entire

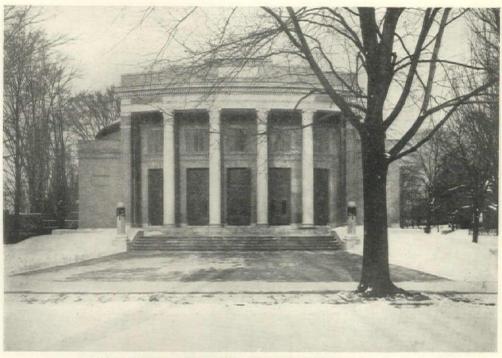
room, except behind the reader's platform, where the wall is thrust back to provide an organ space, thus calling for the use of free columns to carry the entablature. The pilasters stand on a travertine stylobate and the door casings are of the same material, or, rather, of material with a travertine effect. organ front consists of three open panels surrounded by a broad stiling of pierced ornament and carried on an ornamented The whole fills in the three open intercolumniations and continue sweep of the walls. The panels containing the pipes are filled with an openmeshed silk fabric, which hangs in heavy folds from the top. The dominant color note of the room, old rose, is set by these hangings, the draperies which curtain off the space under the organ and the damask with which the wall panels are hung. The tone is taken up in the ceiling, while further touches are to be found in the lighting fixtures, the hardware and the ornamental details of stucco and woodwork.

The large windows, too, fall into harmony with the decorations, both as regards color and design. In fact, every item entering into the equipment of the building was carefully studied in its relation to every other item. Especial care was exercised in designing the glass, to the end that a rich decorative effect might be produced without sacrificing the vol-

ume of light.

The pews, reading desk, readers' chairs and other woodwork are all oak; and in all important panels the veneers are divided and the grain is run diagonally to the axis, thus producing an interesting effect of feathering. The scriptural quotations, which so often prove an eyesore by being painted indiscriminately upon any available surface, have here been made a feature of the architectural effect. as they are carved in wood panels placed above the doors which flank either side of the pulpit. Being enriched with color, they are not only legible from all parts of the auditorium, but also have a distinct decorative value.

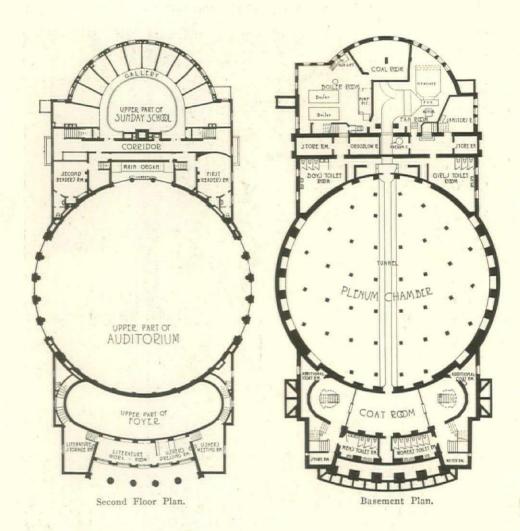
The artificial lighting is derived from a series of twelve torchères, on the wall panels, carrying powerful indirect re-



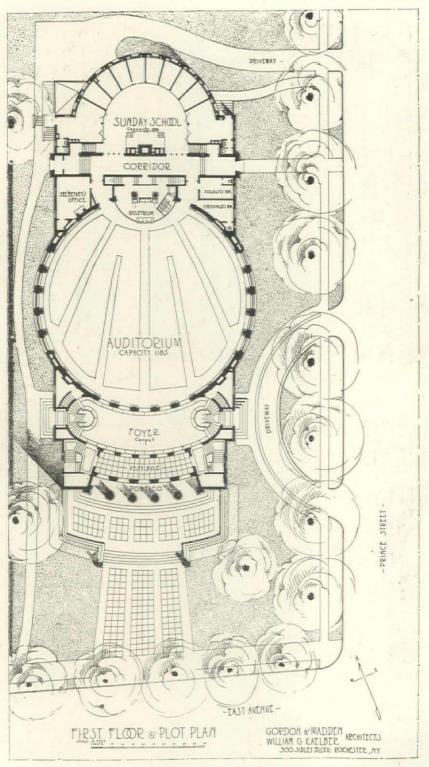
FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.



FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.



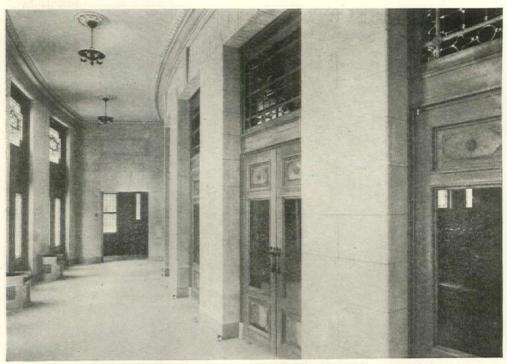
FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.



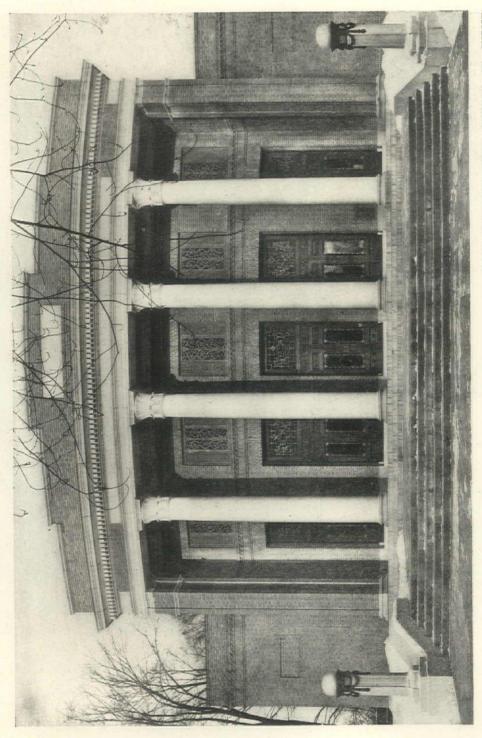
FIRST FLOOR PLAN—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.



FOYER-FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.

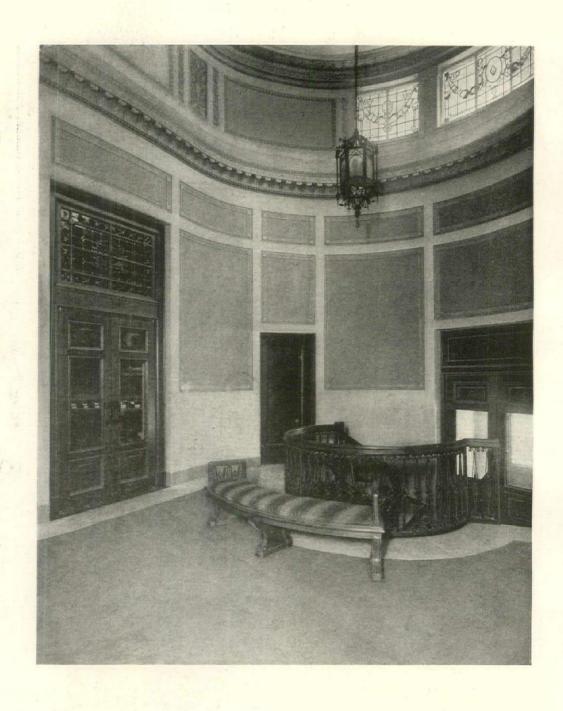


ENTRANCE VESTIBULE-FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.

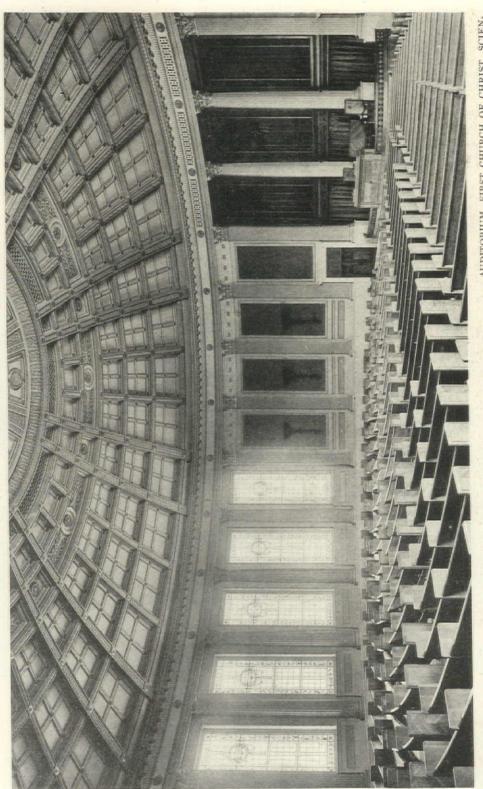


MAIN ENTRANCE—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MAD-DEN AND WILLIAM G. KAELBER, ARCHITECTS.

,356

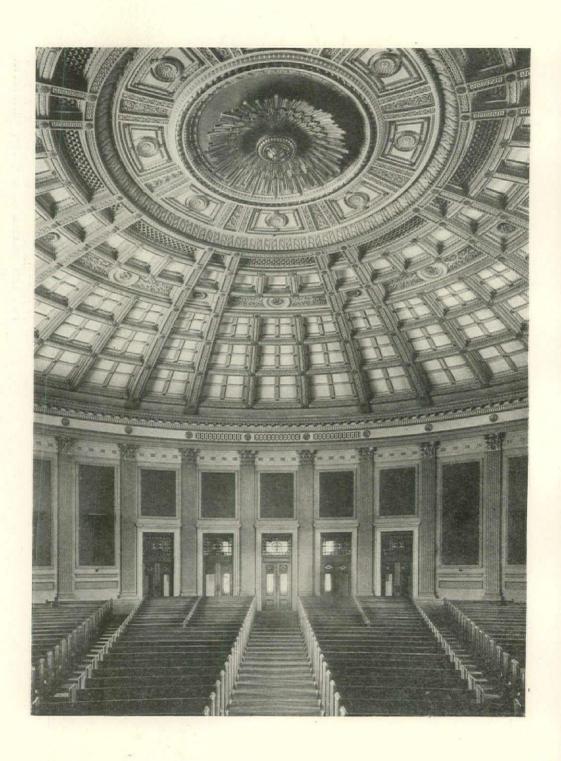


DETAIL OF FOYER—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.

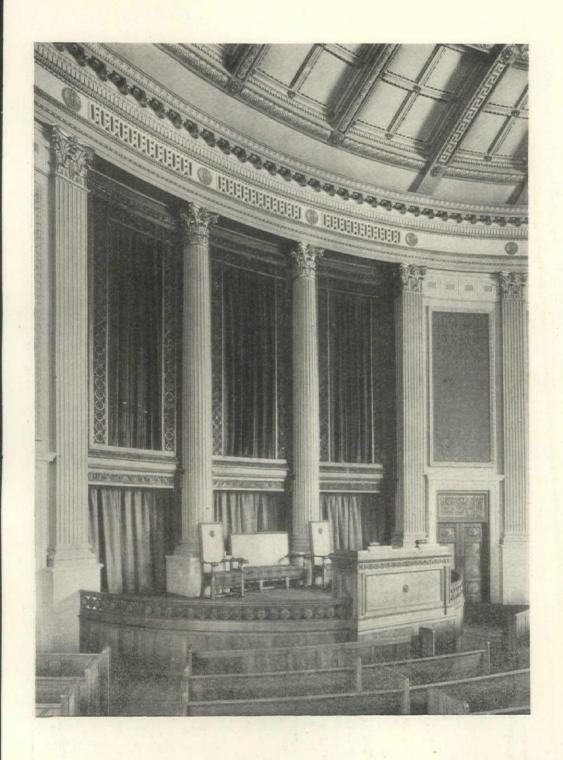


AUDITORIUM—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.

SUNG.



AUDITORIUM FROM READER'S PLATFORM—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.

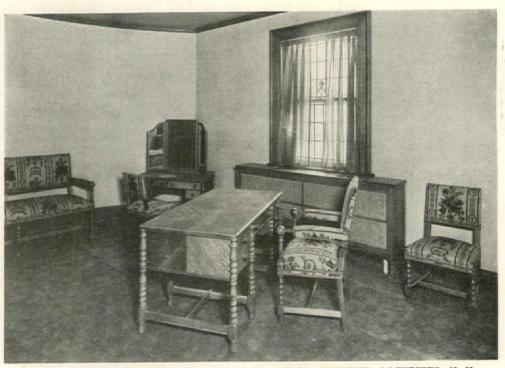


READER'S PLATFORM AND ORGAN FRONT—FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. GORDON & MADDEN AND WILLIAM G. KAELBER, ARCHITECTS.

-586-



TRUSTEES' ROOM-FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.



SECOND READER'S ROOM-FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.

flectors, which throw the light upward into the dome. A small amount of direct illumination is provided in the brackets and on the gold sunburst at the center of the dome, but the general illumination of the room is indirect.

All the hardware is of special design and is executed in bronze, much of it being enriched with colored enamels. The bronze panels of the five pairs of front doors are also carried out in the same manner.

The Sunday School room is treated very simply, both in color and in design. The readers' rooms, soloist's, organist's and ushers' rooms are all furnished with specially designed furniture, but have been kept quiet and restrained in effect. In the trustees' room a more vigorous note has been struck, and both furniture and woodwork have been given a distinctly Italian character, all the woodwork in the room having been designed to carry out this feeling, and is greatly enhanced in value by a liberal use of color.

From the description, it will be seen that color plays a strong part in the dec-orative effects of this building. It is most unfortunate that all this effect is of necessity lost in photographic representation.

Architects have their minds so engrossed with the problems of design and construction that they are apt to disregard the problems of decoration as being matters of minor importance which can be turned over to some handy wielder of the paint brush for solution. The result is that many buildings of excellent design have their interior effects practically destroyed through the lack of an intelligent use of color. Though an architect may, as a result of his training, see a building from the standpoint of abstract design, the fact remains that to the eve that is not specialized the element of color makes a far more direct appeal than either line or mass. This is coming to be recognized more and more by the architectural profession, and there is an increasing tendency to see beyond the black and white of the drafting table and to visualize the completed structure as clothed with a garment of color.

The Rochester church was intended to be a representative example of all that is demanded in the housing of a Christian Science organization; and in discussing the building, Mr. Gordon pointed out both the spirit that was to be reflected in the design and the practical requirements that were to be considered in the plan. Calling attention to the manner in which the house of worship reveals the intellectual status of the people who create it, he traced its architectural evolution from the temple of mystery in ancient Egypt to the temple of learning of our time, an evolution of which the Christian Science church is the latest product.

The Christian Science architect must consider the intellectual tendency of this progress, and among other passages from 'Science and Health," by Mary Baker Eddy, should have in mind particularly

the following:

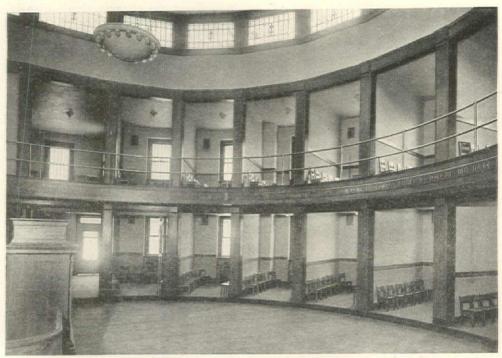
"Beauty is a thing of life which dwells for ever in the eternal mind and reflects the charms of His goodness in expres-

sion, form, outline and color."

The practical requirements are: First, an auditorium of a size carefully estimated for the congregation which is to be housed. It is a policy of the Christian Science organization to establish a number of small churches rather than to develop a few excessively large ones. Second, the auditorium should be so planned and its proportions and finish should be such as to produce perfect acoustics, for the all important use of the building is the teaching of lessons taken from the Scriptures and correlative passages from "Science and Health." Third, the windows should be so located and be of such design and color that they will admit a sufficient quantity of soft, warm light to make reading possible in any part of the auditorium. Fourth, the artificial illumination should be indirect or semiindirect, with all light sources so placed and protected as to prevent a glare from shining into the eyes of the people. Fifth, the embellishments should be so studied as regards scale and color that they will produce an effect of comfort and repose. The colors should be warm, harmonious and soft, the details restrained and refined, with the intent that no part of the



SUNDAY SCHOOL ROOM-FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.



SUNDAY SCHOOL ROOM-FIRST CHURCH OF CHRIST, SCIENTIST, ROCHESTER, N. Y. Gordon & Madden and William G. Kaelber, Architects.

ensemble shall distract the thought from the object for which the room was created-the study of truth. Sixth, in addition to the auditorium, a large comfortable foyer should be provided which should be more than a mere passageway to the auditorium, for this is the gathering place after services and provides the only means of social intercourse inside the church building; all other social activities are outside of the church and are matters with which the church has nothing to do. Thus, no provision need be made for social rooms, dining rooms, kitchens, and the like, which are so important a factor in the churches of many denominations. Seventh, large check rooms for both men and women should be so located as to be readily accessible from the fover, for it is becoming customary to lay off outer wraps before entering the auditorium. Toilet rooms should of course be located close by if possible. Eighth, the Sunday School room should be as complete as means will permit and should be planned with a separate room for each class, all of which should open into the large room. Ninth, special rooms should be provided for the trustees, for the first and second readers, for the organist and the soloist, also fairly large rooms for the ushers and the literature committee.

The uses for which the various rooms are intended will naturally dictate their furnishings, yet a few suggestions on this subject may not be amiss. The foyer, being a distinctly formal room, calls for but little in the way of furnishings, but a few dignified chairs or benches placed in a formal manner about the room will not only add character, but will also enhance the comfort of those using it.

The trustees' room should reflect the importance of the body which occupies it and should have furniture of a dignified character. A long central table, good substantial chairs, a seat for callers, a roomy desk for the secretary and some provision for disposing of coats and hats—all these items should be of good de-

sign without necessarily being expensive. The readers' rooms, which are so often merely bare offices, can with but little expense be made attractive and homelike. The furnishings are simple, consisting of a writing table, a few chairs and perhaps a couch or settle, but in the second readers' room the addition of a small dressing table and mirror will add materially to the comfort of the occupant. Simple curtains, a rug, and good color on the walls, give the finishing touches to what might have been bare and uninviting.

The organist and soloist require only a table, a chair or two and a commodious music cabinet in their rooms, although the soloist would doubtless appreciate the same toilet facilities that have been suggested in the second readers' room.

The big questions of heating, ventilation and other engineering problems are in no way different from those encountered in other types of public buildings, so do not require consideration here.

The church architecture of this country has been as a whole mediocre during the past century. Much of it has been the work of untrained architects and builders who were incapable, even with the best of intentions, of producing good work. The personnel of building committees has been too often determined by considerations entirely foreign to their knowledge of architecture and building operations, and this lack of fitness has borne its logical fruits. It is gratifying to note at the present time a healthful change in these matters and a general growth in the appreciation of good architecture. The professional training of architects is of a higher order, committees are demanding better things and as a result we have a leaven of well designed church buildings spreading throughout the country, which leaven is bound to work and to produce a standard of church architecture which will be a credit and an inspiration to religious organizations.



CARVED WOOD CHANDELIER FROM KENSINGTON PALACE, NOW AT BRYMPTON D'EVERCY, SOMERSET.

English Architectural Decoration

Text and Measured Drawings by Albert E. Bullock

Part II

AVING briefly related in outline the general historical progress of decoration from the advent of the Renaissance, it remains to enter into rather fuller detail concerning the principles governing the designing of examples in the several periods. Apart from the disposition of decorative ornament, the chief factors in an original composition may be said to be the proportions of the panels and the size, projection and profile of the moldings, whether the design be accompanied by a columnar treatment or be merely a paneled theme.

In Jacobean work the panels were invariably small, while the stiles rarely exceeded two inches and the moldings an inch over all, having very small members and giving a very flat effect. This, however, does not apply universally, as there are some exceptions in regard to the main cornices, the caps and bases to columns and pilasters and the surbase moldings, which were usually very bold, as were also the moldings and rustications in chimneypieces, especially marble chimneypieces executed during reigns of James I and Charles I. latter were frequently ordered from some atelier in London or other principal town, and a certain vogue followed the progressive reputation acquired by a well known mason or sculptor, such as the King's Mason, Nicholas Stone of Long Acre, who with his sons contracted for a great many chimneypieces besides much wainscoting during the first half of the seventeenth century, their commissions extending as far north as Edinburgh. In later times one Peter Bossi executed some fine inlaid marble chimneypieces for various residences in Ireland, examples of which are to be seen in the Victoria and Albert Museum, London.

The early paneled rooms of this period were generally of oak from floor to ceiling. The ceilings were plastered in broad geometric ribs interlacing in various patterns. There were, however, certain notable exceptions, one being an example at Langley Church, namely, the Kidderminster Library, where the paneling is painted chocolate and white, with oil-painted panels depicting local scenes and religious subjects on painted ovals within the moldings forming the panels of the room. As a library it is a very ingenious one, as the paneling is so arranged that the cupboards containing the manuscripts are concealed from view; the shutters to the windows and the ceiling are similarly paneled and painted to harmonize with the decorative scheme.

During the period of Charles I, or from 1630 onwards, the panels were made much larger in scale, and oak was used more sparingly; but there are frequent instances where no paneling existed, the walls being subdivided by means of enriched pilasters, as at the Queen's House, Greenwich, by Inigo Jones, and some of the rooms at Brympton D'Evercy, the residence of the late Sir Ponsonby Fane in Somerset. This latter house has, however, survived many generations with consequent changes of style which render it difficult of approach from a critical aspect for the purposes of compari-The most interesting examples of decorative art contained in this residence are the chimneypieces, which are mostly of the early eighteenth century, together with some fine carved wood chandeliers removed from Kensington Palace, and also a Queen Anne bedstead.

During the reign of James I it was usual to have marble chimneypieces in two tiers, the lofty overmantel being inlaid or carved in the same material, of which there are several examples at Hatfield House and Balsover. Thereafter it became general to make the overmantel in wood, paneled and carved with enriched moldings, as at Belton and Hampton Court Palace. At the latter place there are some interesting examples of

angle chimneypieces with stepped shelving for china. Pear wood carving and inlaid hardwoods and veneers formed the chief elements of decorative designs for these features, some fine instances of which exist at Chatsworth, the residence of the Duke of Devonshire, and also at Holme Lacy and Penshurst. The surrounding architrave was usually of marble; and the fire being an open one, the back was of cast iron. When grates became fashionable much artistic taste was centered upon this important object, until the Adam brothers entered the arena with their new and remarkable designs of carved and inlaid marble chimneypieces and steel grates of the hob type, various phases of which became familiar objects for many years. Subsequently wood chimneypieces with marble slips became the vogue, with curbs of metal or marble; and a general degeneracy in artistic expression is observable during the early Victorian era. Marble obtained in certain cases, as with the work of Sir John Soane and Charles Barry, but even then it was used sparingly.

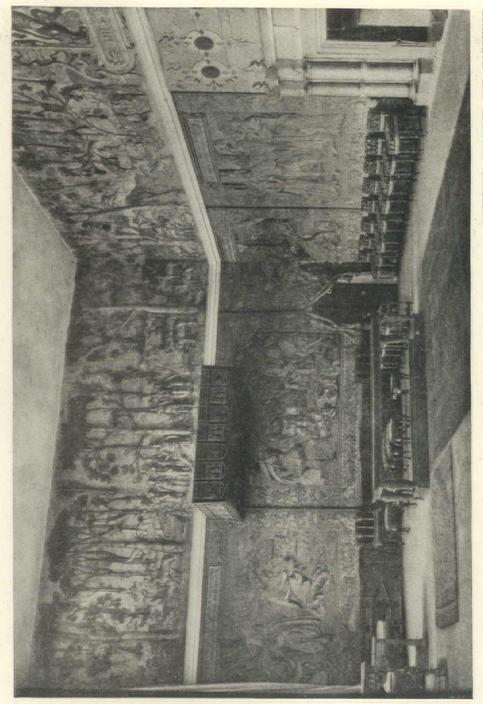
With staircases we enter upon a region in which much skill was exhibited during the several periods. The heavy Jacobean staircases with large balusters and lofty carved newels gave place to a type in which the balusters were replaced by carved panels in scrolled leaf work of a high grade of execution and design. With the Wren period the balusters return and are again heavy and massive of form, with the handrail broad and with mitering upon the newel caps, which principle was adopted in a more refined manner during the early and middle eighteenth century. The balusters during these times became smaller in size, with more turning; and there were two and sometimes three balusters to a tread. the handrail being frequently ramped up to the newels in a fine curve. In still later times stone and marble staircases with wrought iron balustrading became fashionable consequent upon visits made to France by English architects and upon the work of French smiths in this country. The fine grilles and gates in churches and mansions throughout the country testify to the skill to which this branch of

art attained during the time of Wren and in subsequent decades.

Perhaps the most interesting study, apart from wood-carving, in the realm of decorative art is that of the plasterer. There are extant many hundreds of examples of Jacobean and Italian craftsmanship, including pendant and ribbed ceilings with curious friezes of conventional ornament and foliage. The frieze in the Presence Chamber at Hardwick Hall is one of the earliest and most notable owing to its lofty scale and expansive design of figures and trees, while examples could be quoted from various country seats, as Knole, near Seven-oaks; Montacute, Somerset; from Exeter and other parts of Devonshire; from Sizergh Castle, Westmorland; Powis Castle and many another familiar historic mansion. But it is the later examples which are of more real interest to the student of decorative art, for they frequently find disciples in later times and their forms often bear repetition in compositions of new schemes.

The work of Inigo Jones was chiefly of massive beam type, wherein the cornice was repeated upon the cross beams and ovals forming spaces for pictures, while in confined areas the spandrils would be modeled in floral designs, as the staircase ceiling to Lord Iddesleigh's mansion, The Pynes, Devon, and Ashburnham House, Westminster, London. At the Queen's House, Greenwich, are several varieties of ceilings by Inigo Jones, and his larger mansions, as Raynham, Norfolk and Wilton, contain many good examples. This architect favored the festoon largely in the cove formed in the angle contained by the relation between the main cornice and the ceiling sur-There was until recently a fine ceiling of this type in an inn at Exeter. in which the centre happened to be of carved wood. If Inigo Jones was responsible for the saloon ceiling at Forde Abbey, he certainly added an entirely new note to ceiling design and construction, for the beams of this fine and lofty room curve down with all their moldings upon the main horizontal cornice which crowns the massive oak paneling

below.



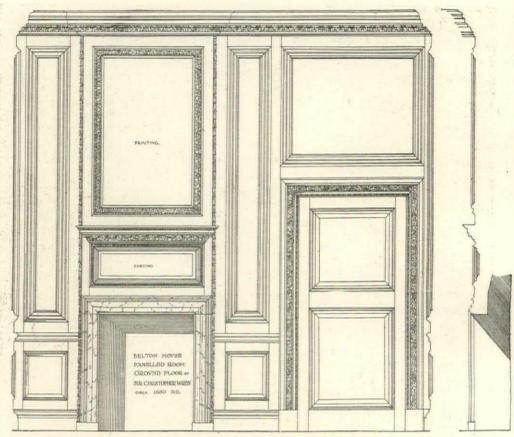
PRESENCE CHAMBER—OLD HARDWICK HALL, BUILT FOR THE COUNTESS OF SHREWSBURY, ABOUT 1567-90.



CHIMNEYPIECE—PALACE OF BROM-LEY-BY-BOW, LONDON, ABOUT 1606.



CARVING BY GRINLING GIBBONS IN THE CHOIR OF ST. PAUL'S CATHEDRAL, LONDON.

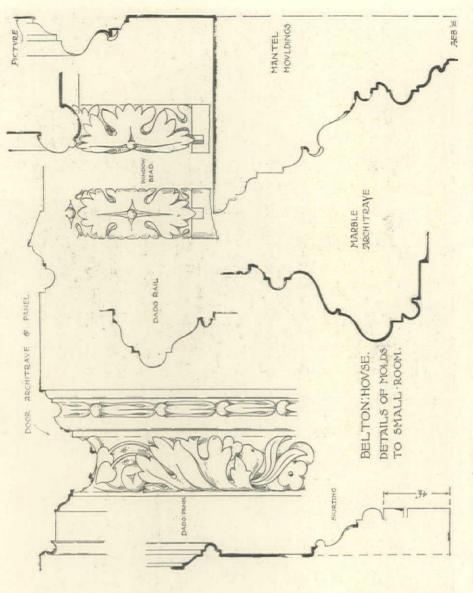


PANELED ROOM (ON GROUND FLOOR)—BELTON HOUSE, NEAR GRANTHAM, LINCOLNSHIRE. SIR CHRISTOPHER WREN, ARCHITECT. ABOUT 1680.

It is, however, to James Gibbs and Sir Christopher Wren that we owe much of the impetus given to ceiling designs and execution of plastering in the latter half of the seventeenth century, and also to William Talman, the architect of Chatsworth, who introduced some fine sculpture and stone carving in the Fountain Court and notably upon the paneled soffit of the stone ceiling to the corridor of this mansion.

Wren's work in church and mansion needs no comment here, as it has formed the basis for study in architecture for many generations. A circular ceiling from Love Lane, London, said to have been taken from a house once in the occupation of Wren, is a typical example of the style and is illustrated in this series; the well-known ceiling from the Board Room of the Offices of the New River Company is among the finest ceilings ex-

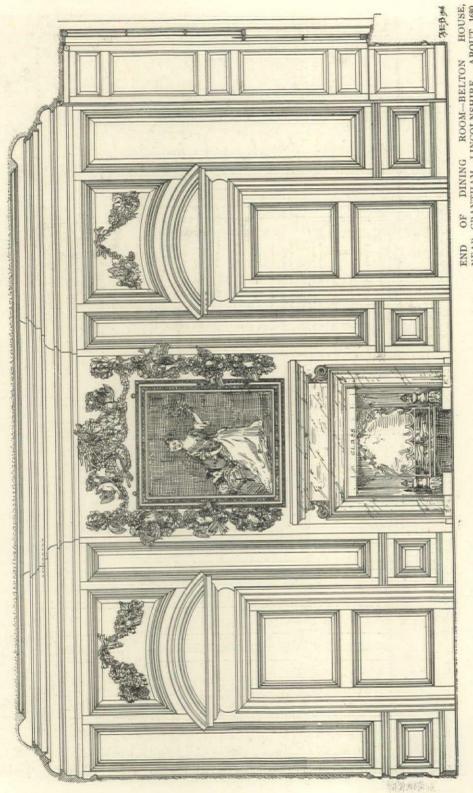
tant, having in the large central enriched oval band modeled birds, fruit and foliage colored in appropriate hues. The vestry of St. Lawrence, Jewry, in the city of London, is another instance of a circular ceiling in a square room, of which the enrichment is gilt and of good design. There are also several fine ceilings at Edinburgh, Dublin, and Belfast in which sculptors were probably employed, since the high relief and excellent modeling of many of these show the hand of experienced craftsmen. The degree of excellence to which plastering had attained at this time is depicted in the examples illustrated from Belton House, near Grantham, the residence of Lord Brownlow (of which the Staircase and Chapel ceilings are the two finest examples), and incidentally the Library ceiling is a barrel vaulted one decorated by Adam with paintings in panels formed



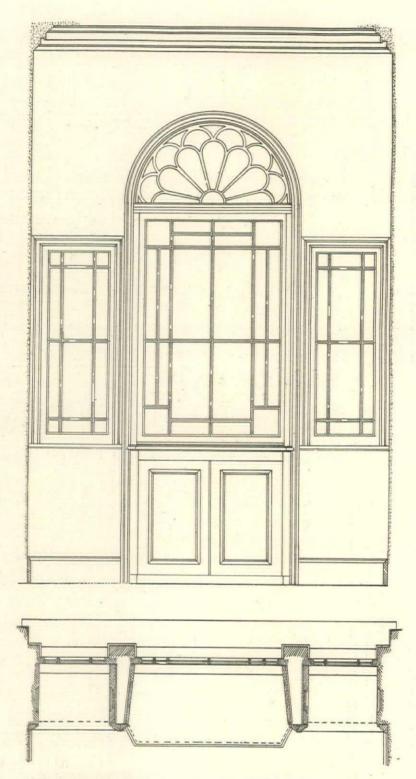
DETAILS OF MOLDS IN PANELED ROOM— BELTON HOUSE, NEAR GRANTHAM.



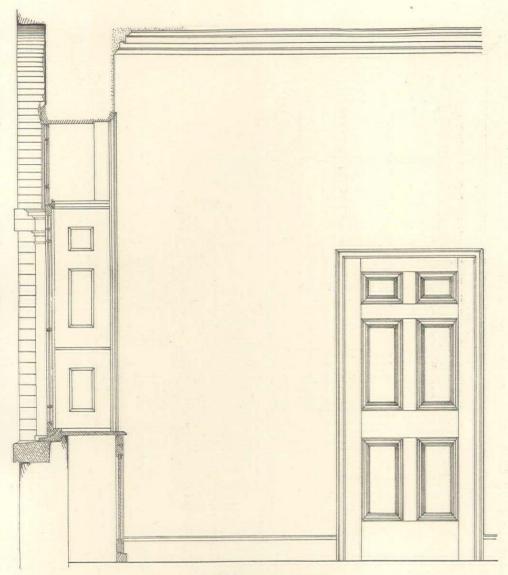
CARVING OVER CHIMNEYPIECE— BELTON HOUSE, NEAR GRANTHAM, LINCOLNSHIRE.



END OF DINING ROOM—BELTON HOUSE, NEAR GRANTHAM, LINCOLNSHIRE. ABOUT 1680.



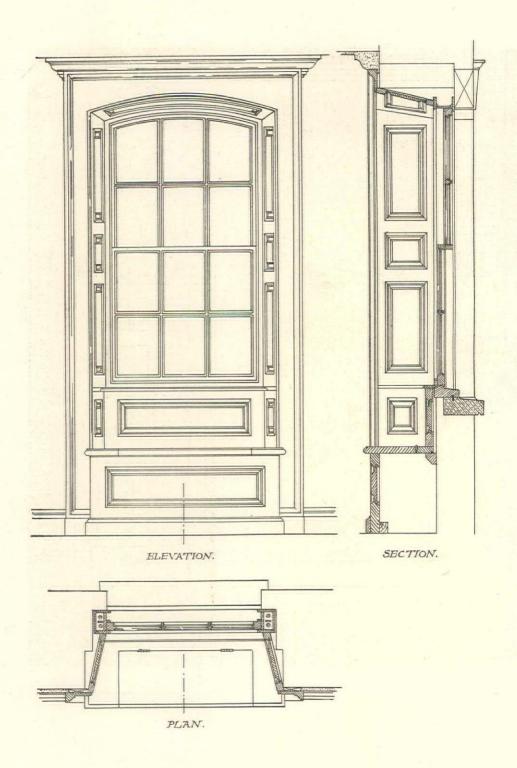
ELEVATION AND PLAN OF AN ADAM PERIOD WINDOW FROM BELLEVUE LODGE, CHELSEA. ABOUT 1771.



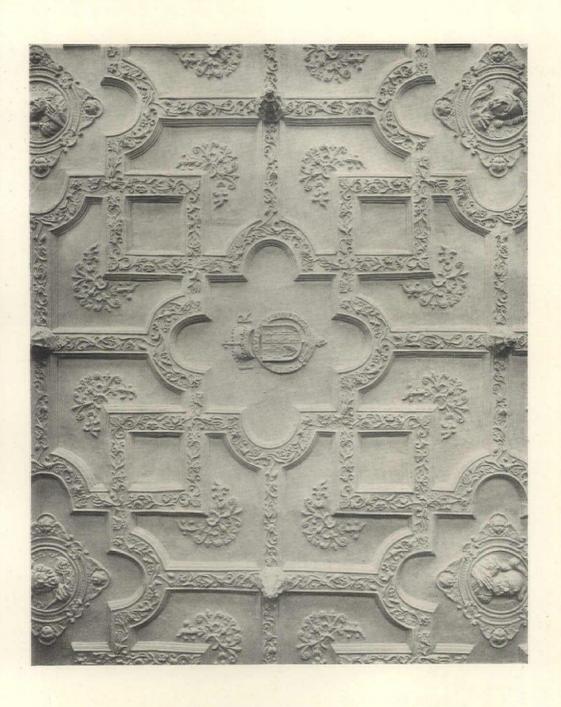
SECTION & DOOR.



ELEVATION, SECTION AND PLAN OF AN ADAM PERIOD DOOR FROM BELLEVUE LODGE, CHELSEA. ABOUT 1771.



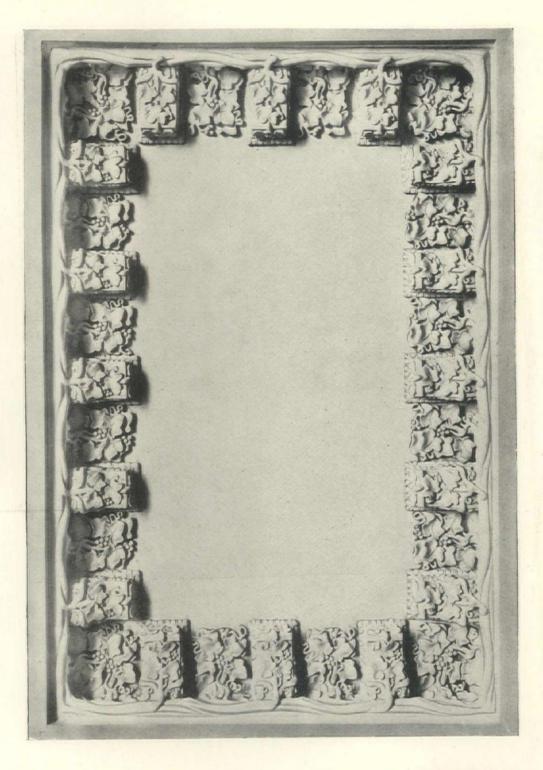
DETAILS OF WINDOW FROM STAR-CROSS, DEVON. LATE GEORGIAN.



CEILING IN THE PALACE OF BROM-LEY-BY-BOW, LONDON. ABOUT 1606.

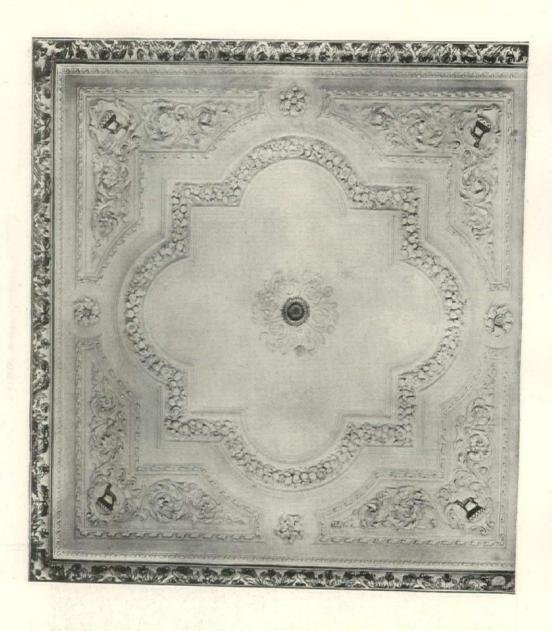


CELLING IN THE WARD SCHOOL, LOVE LANE, FROM THE PERIOD OF WREN, ABOUT 1680.



CEILING IN AN OLD HOUSE, CLARE MARKET, LONDON, E. C. ABOUT 1670.

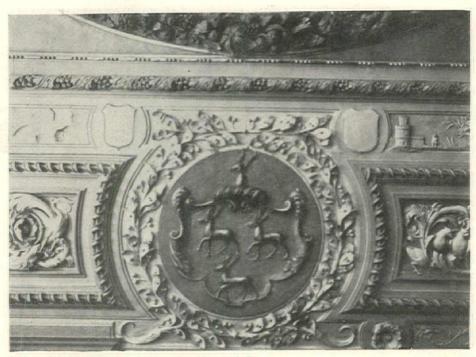
discoulture.



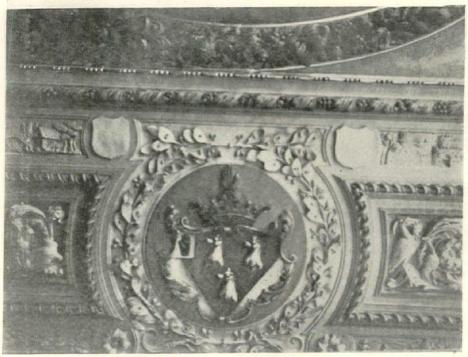
STAIRCASE CEILING—BELTON HOUSE, NEAR GRANTHAM, LINCOLNSHIRE. ABOUT 1680.



CEILING IN SIZERGH CASTLE, WESTMORLAND,



Arms of Greene.



Arms of Sir Hugh Middleton.

DETAILS OF CEILING IN NEW RIVER COMPANY'S BOARD ROOM, PERIOD WILLIAM III, ABOUT 1687.

in the segmental ends of the style of Angela Kaufmann, who did many paintings for the brothers Adam. The College Chapels at both Oxford and Cambridge give evidence of the general pitch of excellence to which plastering had attained during the closing years of the

seventeenth century.

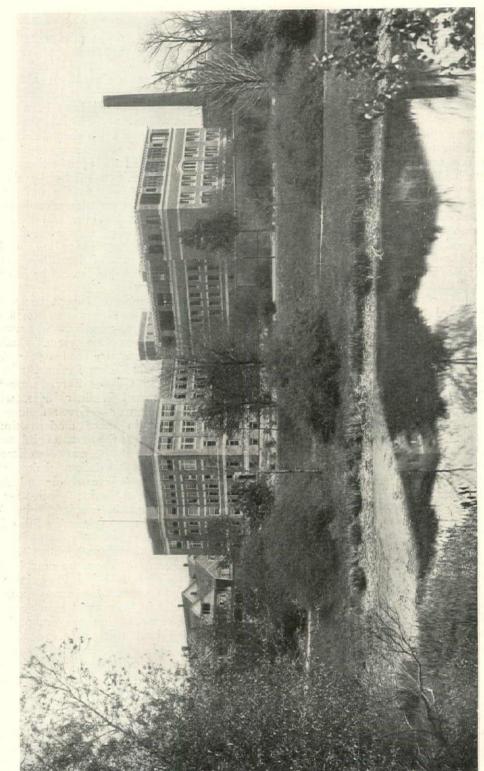
There followed a variety of efforts in this cult in subsequent decades which fell short of this degree of success, but which are, nevertheless, historically of much interest. The art of Chippendale introduced a new form based partly upon the Chinese vogue which became fashionable in his day and upon the work of the disciples of the French school of Boule. This class of work, with certain Classic additions, was also adopted in designs by Sir William Chambers, of which there is an instance at Pembroke House, Whitehall Gardens. This was immediately followed by the work of the brothers Adam, who from their atelier in the Adelphi issued such an extensive array of delicate refinements as are to be seen in the chic clubs and mansions in various parts of England. Sion House near Brentford is the most notable of these examples where the stone screen on the Isleworth road exhibits the work of a genius in addition to being a foretaste of what may be seen within the lordly mansion on the Thames. These artists, with their coterie of Italian assistants, formed a school of design which entered into every phase of home decoration and furniture, and created a fashion which took such a hold upon the building fraternity and more particularly the owners of large mansions that the demand was for a time greater than the supply, as every art enthusiast cultivated the desire to obtain some representation of the work of the famous brothers, who, but for their unfortunate speculations, would have died

wealthy rather than have ended in bankruptcy. Incidentally they were exceedingly clever planners, as Boodles and other clubs in London bear witness (Boodles Club was designed by Adam and executed by John Crundler), and had their notoriety been less extensive their art would undoubtedly have been of a more lasting character. As it is, their extensive practice and rich clientele created an envy among imitators who copied, or rather caricatured, their productions with an endless repetition of finicky detail which eventually brought the style to a climax from sheer satiation of reiterated forms. Their art, however, will live long with those who desire refinement, and it has in itself formed a link in the chain of the history of decoration without which the sequence would be incomplete.

Very little serious attempt has since been made to develop a new form of ceiling design or any fresh motives which have not some previous origin. During the turn of the century the better known architects, as Sir Robert Taylor, Sir John Soane and Sir Charles Barry, were all severely Classical in their ideas, with either an Italian or a Greek feeling in their works; in more modern times George Devey was the first to build upon the foundation of the preceding forms of decoration in his delightful domestic work and to adapt from Knole and elsewhere the most interesting features to the requirements of the residences he designed and built in various localities for

his clients.

It remains, therefore, to describe the nature of some of the more notable examples mentioned in the foregoing remarks, and in particular to relate somewhat briefly in later articles an account of the prime movers in the several periods and their schools of thought.



VIEW FROM THE FENS—PSYCHOPATHIC HOSPITAL, BOSTON. KENDALL, TAYLOR & CO., ARCHITECTS.

SOME RECENT HOSPITALS BY KENDALL, TAYLOR & C.

In view of the current tendency toward specialization in the case of hospital architecture, it will be of interest to preface a selection from the recent work of Kendall, Taylor & Co. by observing that the founders of this firm have been devoting particular attention to hospital planning for nearly forty years. The hospitals designed by them embrace the greatest variety as regards both type and size of structure, and are widely distributed throughout the country.

The present selection, being limited to buildings heretofore unpublished, is a very miscellaneous one. Its value lies mainly in the numerous reproductions of floor plans, which may be accepted as studied modern solutions of the architectural problems involved in the different

types of hospitals shown.

Heading the list of buildings illustrated is the Psychopathic Hospital, in Boston. In 1908 the State of Massachusetts, acting upon a report by the State Board of Insanity to the effect that the great metropolitan district in and around Boston was inadequately served by the existing institutions, decided to erect a hospital in the city proper for the early treatment of the insane and for preliminary study of symptoms and diagnosis. The Psychopathic Hospital is a complicated aggregation and its plan calls for practically all the modern methods of treatment of the insane. The building is of red brick with terra cotta trimmings. The appropriation precluded any attempt at display, but no pains were spared to provide everything necessary for the care of the patients. The appropriation for the site, building and furnishing was \$600,000.

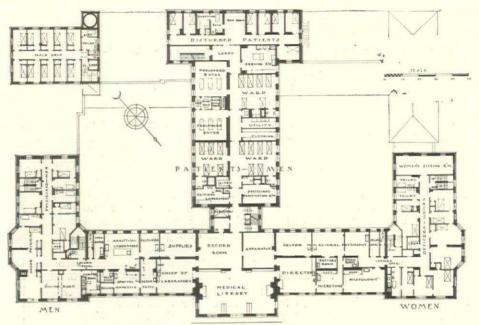
A building of another type is the Samuel Merritt Hospital, in Oakland, California. The institution is endowed and began operations on its present site in the buildings of a former school of theology. The old buildings had been re-

modeled, and an operating pavilion and one ward were under construction at the time of the San Francisco fire. Somewhat damaged by the earthquake, the buildings were repaired and completed. Subsequently an administration building and a nurses' home were added. The block plan here reproduced emphasizes the value of a preliminary study to determine the main points of future growth in order that the buildings when completed may constitute a co-ordinated

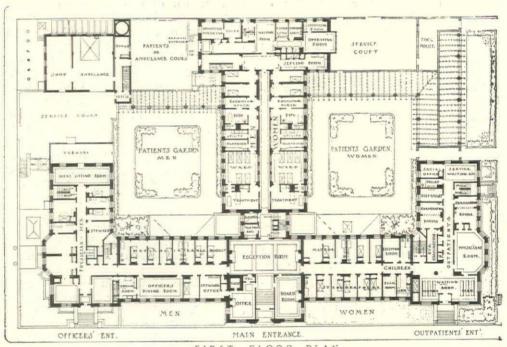
group.

One of the most notable hospitals in the country is the Boston City Hospital, founded in 1863. It has been for years an exemplar of progress and efficiency. having commanded the services of an able board of trustees and of some very remarkable administrators as superintendents. Under the late Geo. H. M. Rowe, M. D., it was everywhere regarded as the leading institution of its kind. Architecturally it has suffered from the political exigencies of various city governments. Originally designed by G. J. F. Bryant, it was added to by various city architects. The Medical Outpatient Building shown on page 236 was designed by Kendall, Taylor & Co. The site was a restricted one, in a corner of the yard and facing on two streets, but entered from the hospital grounds. It has proved to be a very satisfactory building for its purpose and cares for a very large number of outpatients.

The West Department of the Massachusetts Homeopathic Hospital was erected from a legacy by John C. Haynes, of Boston. It comprises a group of three buildings, an administration building and two wings connected by corridors. A power plant, with laundry and garage, is located in the rear of the main building and is connected with this by underground piping. The West Department is exclusively used for contagious diseases. It has accommodations for one hundred

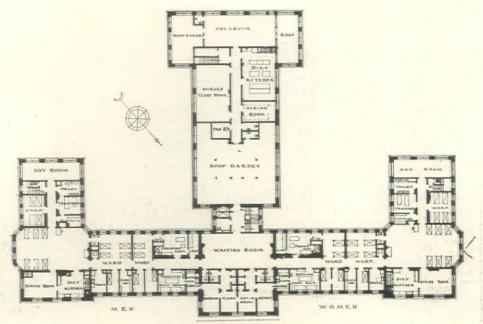


SECOND FLOOR PLAN

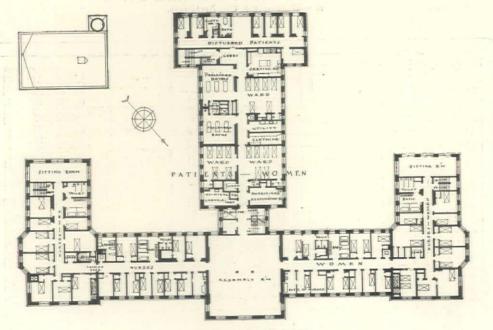


FIRST FLOOR PLAN

PSYCHOPATHIC HOSPITAL, BOSTON. KENDALL, TAYLOR & CO., ARCHITECTS.



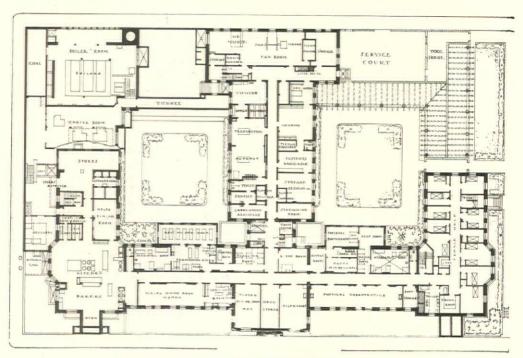
FOURTH FLOOR PLAN



THIRD FLOOR PLAN



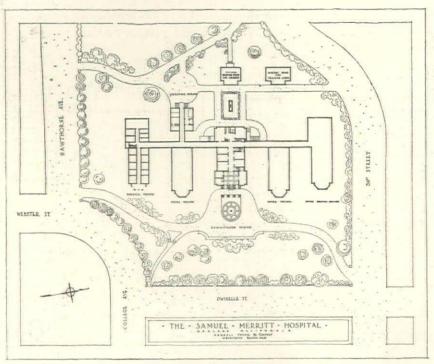
GENERAL VIEW-PSYCHOPATHIC HOSPITAL, BOSTON. Kendall, Taylor & Co., Architects.



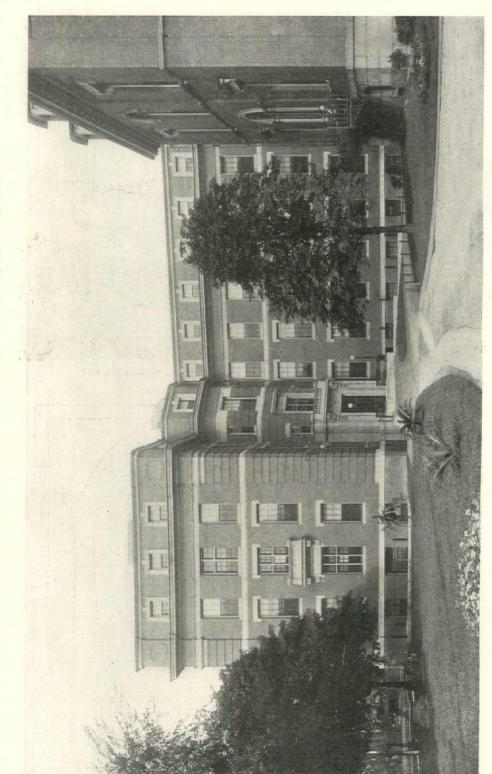
BASEMENT PLAN-PSYCHOPATHIC HOSPITAL, BOSTON. Kendall, Taylor & Co., Architects



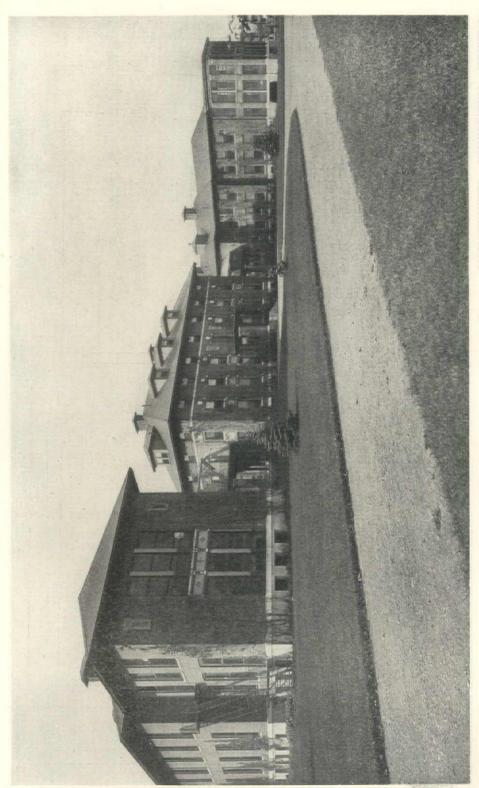
GENERAL VIEW—SAMUEL MERRITT HOSPITAL, OAKLAND, CAL. Kendall, Taylor & Co., Architects.



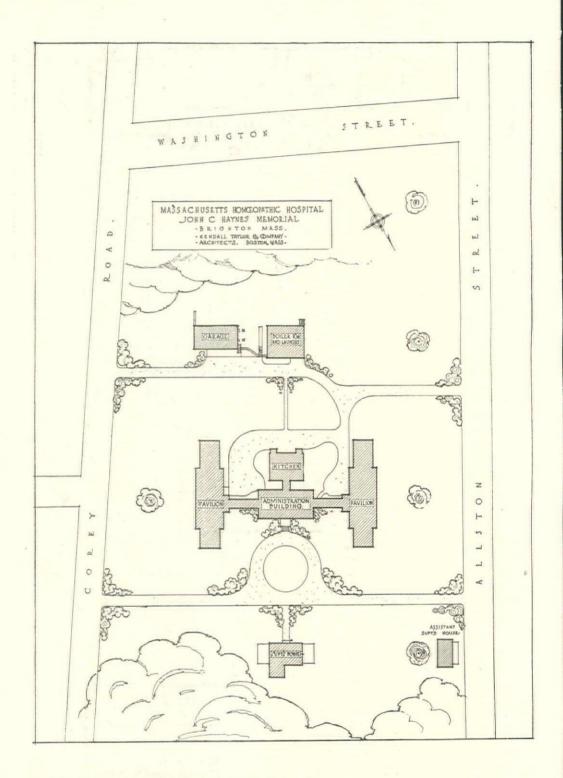
BLOCK PLAN-SAMUEL MERRITT HOSPITAL, OAKLAND, CAL, Kendall, Taylor & Co., Architects.



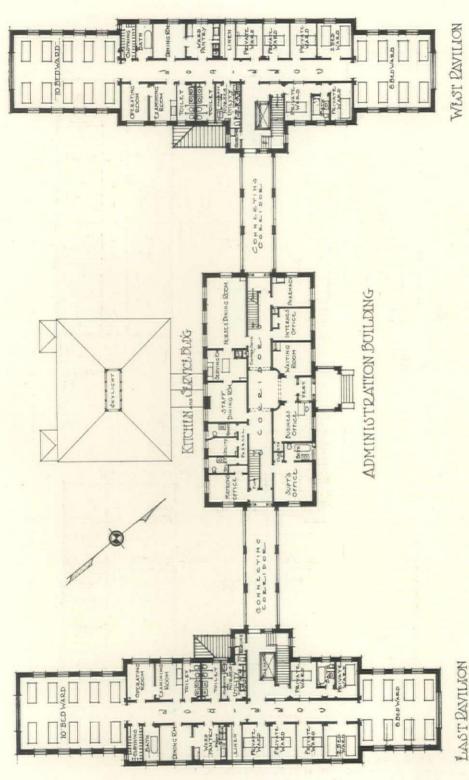
MEDICAL OUTPATIENTS' DEPARTMENT—BOSTON CITY HOSPITAL. KENDALL, TAYLOR & CO., ARCHITECTS.



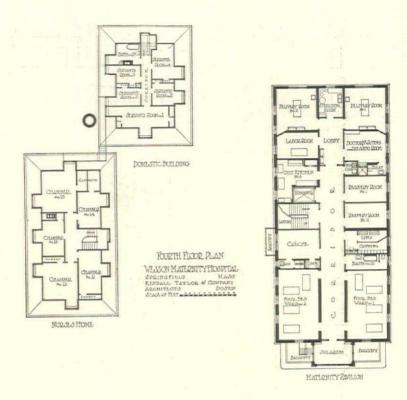
MASSACHUSETTS HOMEOPATHIC HOSPITAL, JOHN C. HAYNES MEMORIAL, BRIGHTON, MASS. KENDALL, TAYLOR & CO., ARCHITECTS.

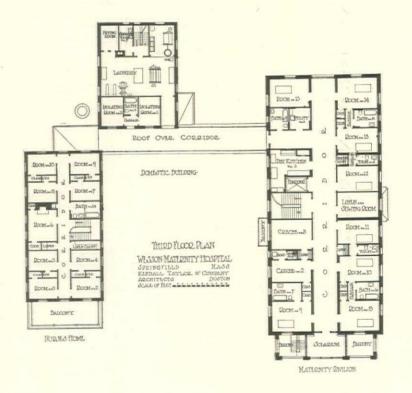


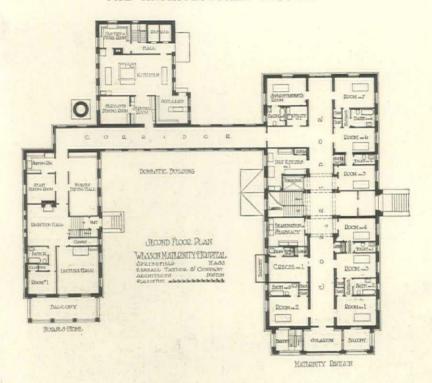
BLOCK PLAN—MASSACHUSETTS HOMEOPATHIC HOS-PITAL, JOHN C. HAYNES MEMORIAL, BRIGHTON, MASS. KENDALL, TAYLOR & CO., ARCHITECTS.

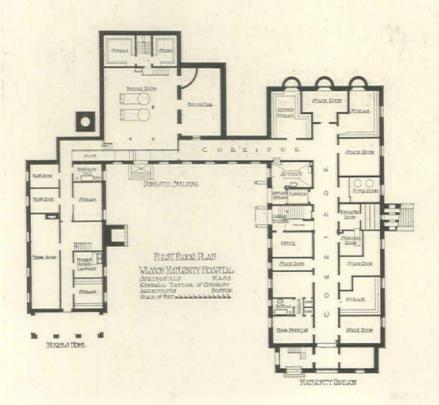


FIRST FLOOR PLAN—MASSACHUSETTS HOMEOPATHIC HOSPITAL, JOHN C. HAYNES MEMORIAL, BRIGHTON, MASS. KENDALL, TAYLOR & CO., ARCHITECTS.





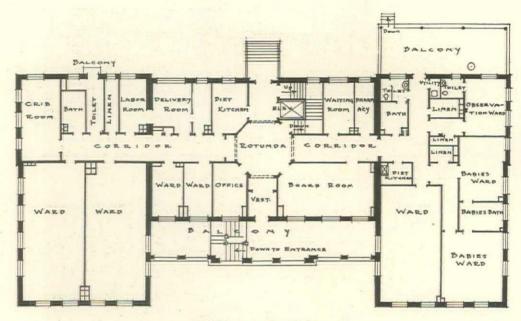




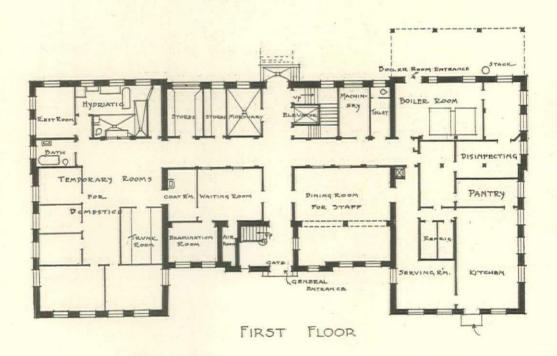
WESSON MATERNITY HOSPITAL, SPRINGFIELD, MASS. KENDALL, TAYLOR & CO., ARCHITECTS.



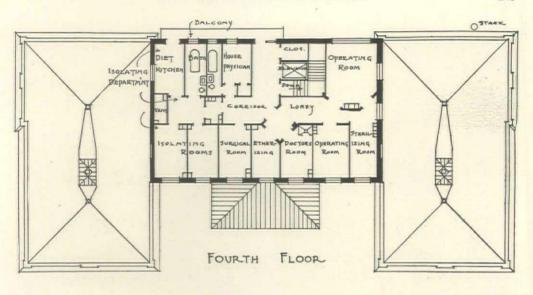
YONKERS HOMEOPATHIC HOSPITAL, YONKERS, N. Y. KENDALL, TAYLOR & CO., ARCHITECTS,

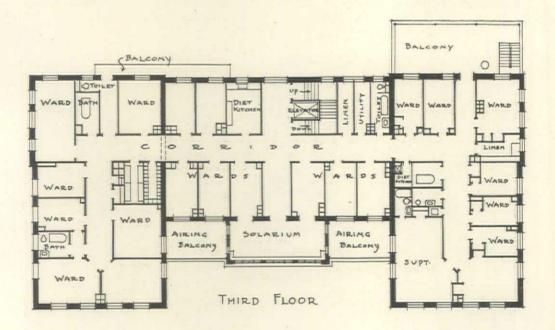


SECOND FLOOR



FLOOR PLANS-YONKERS HOMEOPATHIC HOSPITAL, YONKERS, N. Y. KENDALL, TAYLOR & CO., ARCHITECTS.





FLOOR PLANS—YONKERS HOMEOPATHIC HOSPITAL, YONKERS, N. Y. KENDALL, TAYLOR & CO., ARCHITECTS.



ELLISON HALL (NURSES' HOME), NEWTON HOSPITAL, NEWTON, MASS. Kendall, Taylor & Co., Architects.

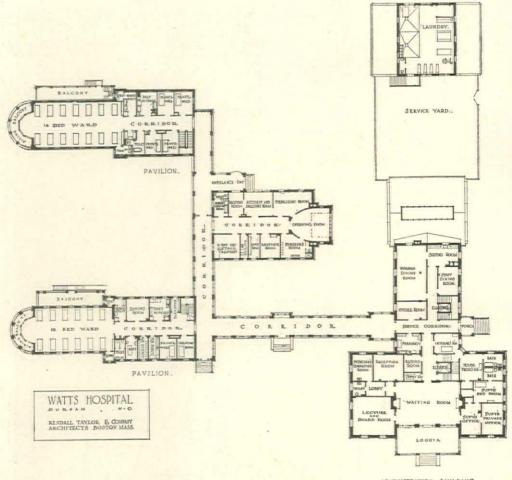


FOUNDER'S MEMORIAL (MATERNITY DEPARTMENT), NEWTON HOSPITAL, NEWTON, MASS. Kendall, Taylor & Co., Architects.



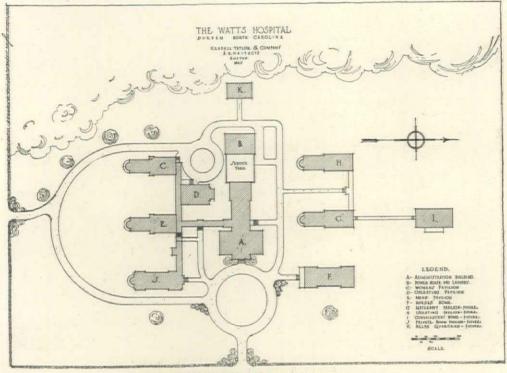
GENERAL VIEW—WATTS HOSPITAL, DURHAM, N. C. KENDALL, TAYLOR & CO., ARCHITECTS.

1



ADMINISTRATION BUILDING

FIRST FLOOR PLAN—WATTS HOSPITAL, DURHAM, N. C. KENDALL, TAYLOR & CO., ARCHITECTS.



BLOCK PLAN-WATTS HOSPITAL, DURHAM, N. C. Kendall, Taylor & Co., Architects.



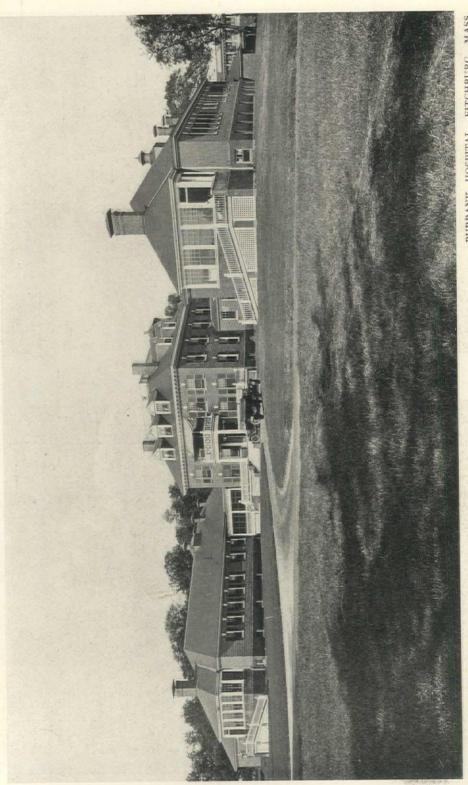
NURSES' HOME-WATTS HOSPITAL, DURHAM, N. C. Kendall, Taylor & Co., Architects.



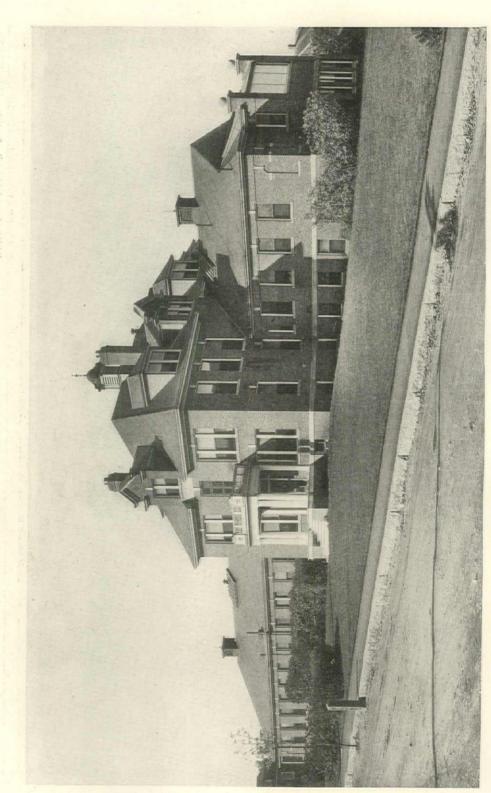
WAITING ROOM—WATTS HOSPITAL, DURHAM, N. C. Kendall, Taylor & Co., Architects.



CONNECTING CORRIDOR-WATTS HOSPITAL, DURHAM, N. C. Kendall, Taylor & Co., Architects.



BURBANK HOSPITAL, FITCHBURG, MASS. KENDALL, TAYLOR & CO., ARCHITECTS.



J. B. THOMAS HOSPITAL, PEABODY, MASS. KENDALL, TAYLOR & CO., ARCHITECTS.

and fifty patients. The airing balconies, shown in the photograph but not on the plans, are a subsequent addition designed for outdoor treatment.

The Wesson Maternity Hospital, in Springfield, Mass., was built from a legacy by D. B. Wesson, a prominent manufacturer of that city, to complement the Hampden Homeopathic Hospital, which he had erected during his lifetime. It cares for mothers and their babies, and represents the solution of a maternity hospital as understood eight years ago.

Another hospital designed primarily for maternity work is the Yonkers Homeopathic and Maternity. Intended originally to meet the need of a hospital for homeopathic physicians, who were not allowed to treat their patients in old school hospitals, it began in an old mansion, on the present site, to which was soon added an adjoining house, which for some years provided all the accommodation required. The corporation maintaining the hospital was composed exclusively of ladies, who hesitated before taking up the task of financing a new building. Finally undertaking it, they were surprised, shortly after erection of the edifice, by a legacy of several hundred thousand dollars from an unknown friend, who announced that "these women are doing something fine and I want to help them." The building stands on high ground, overlooking the Hudson and the Highlands on the opposite shore. It has accommodations for fifty patients, a children's department, maternity rooms, a delivery and operating department, isolation rooms, and a hydriatric department. Extensive additions are now being considered, and adjoining land has been acquired which will permit the adequate development of the institution.

The Newton Hospital, in Newton, Mass., started as a cottage hospital to meet the very evident necessities of a suburban city, is an example of how gen-

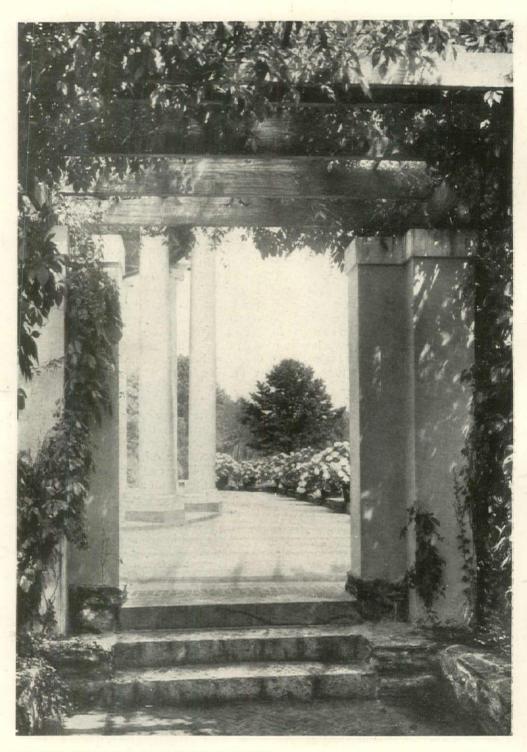
erous citizens rally to the needs of an efficient institution once established. Many of the buildings have been given to the hospital. Only two are illustrated here-namely, the Founders' Memorial, which was given in memory of the original supporters of the hospital and is devoted to maternity work, and the Nurses' Home, given by Mr. and Mrs. Frank A. Day, in memory of Mrs. Day's parents and therefore named Ellison Hall.

Durham, N. C., is a busy manufacturing town, a type of the New South, with thousands of people working in its mills and factories. For many years it had no provision for the sick and injured. Geo. W. Watts, a public-minded citizen, in 1890, built a small wooden hospital and gave it to the public with a suitable endowment. Fifteen years later the buildings of the institution had become too small, and again Mr. Watts responded to the demand. He purchased an ample site outside the city limits, erected several buildings and had drawn up a block plan providing for future additions. He has since built the Nurses' Home and a pavilion and has substantially endowed the hospital. The property is held by trustees for the town and county, and provides free treatment for any who cannot pay, the charges for others being very moderate. This is one of the leading hospitals in the South and many features of its plan have been adopted by other institutions.

The Burbank Hospital, at Fitchburg Mass., is one of the earlier types of separate one-story pavilions connected with a central administration building and op-

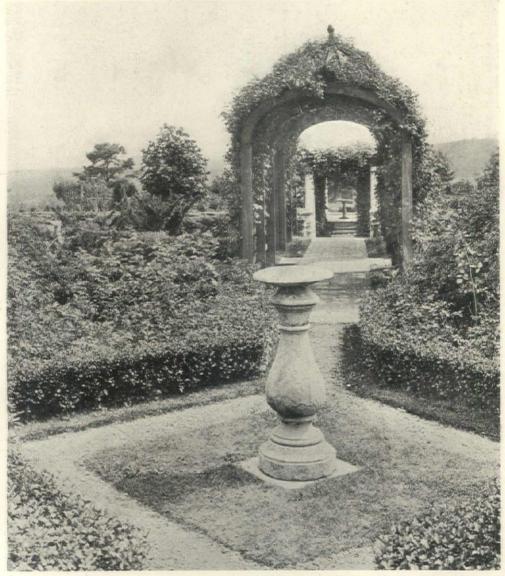
erating pavilion.

The J. B. Thomas Hospital, at Peabody, Mass., is an interesting example of the small general hospital with all classes of service, help and staff included under one roof. It serves a town of considerable manufacturing interests in eastern Massachusetts.



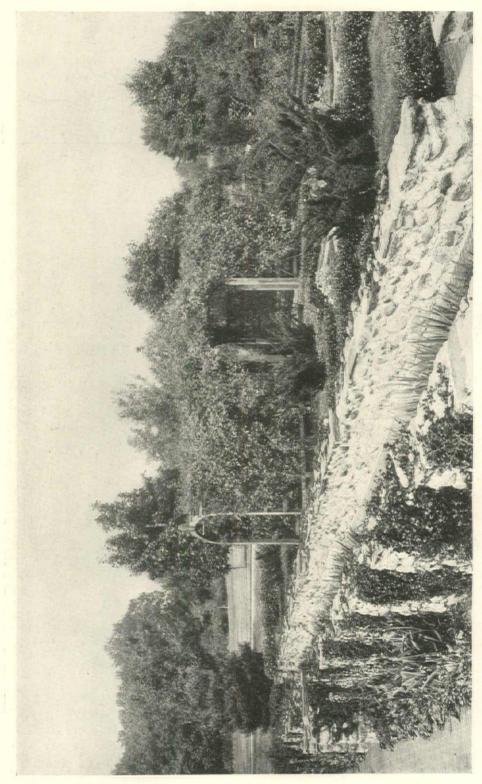
LCOKING THROUGH ROSE ARBOR—RESIDENCE OF GEORGE C. BOWEN, ESQ., PUTNAM COUNTY, N. Y. LA FARGE & MORRIS, ARCHITECTS.





VISTA THROUGH ARBORS—RESIDENCE OF GEORGE C. BOWEN, ESQ., PUTNAM COUNTY, N. Y. LA FARGE & MORRIS, ARCHITECTS.

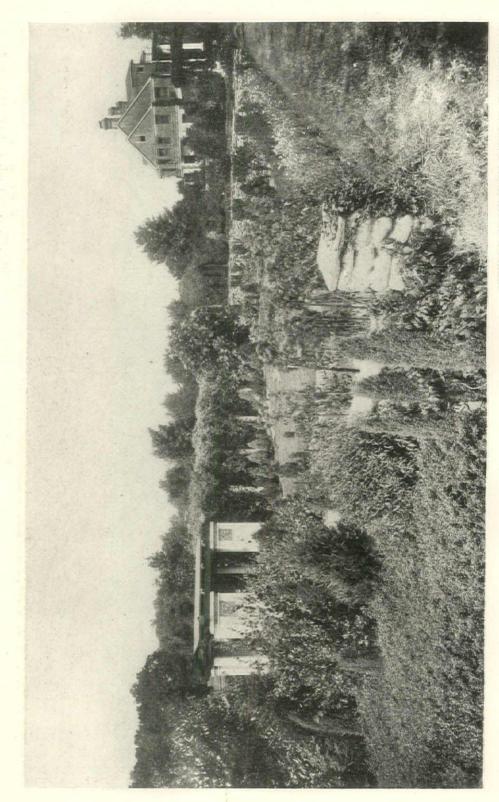
40.40



VIEW OF ROSE ARBOR—RESIDENCE OF GEORGE C. BOWEN, ESQ., PUTNAM COUNTY, N. Y. LA FARGE & MORRIS, ARCHITECTS.



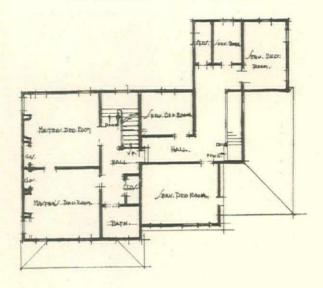
GENERAL VIEW OF GARDEN—RESIDENCE OF GEORGE C. BOWEN, ESQ., PUTNAM COUNTY, N. Y. LA FARGE & MORRIS, ARCHITECTS.

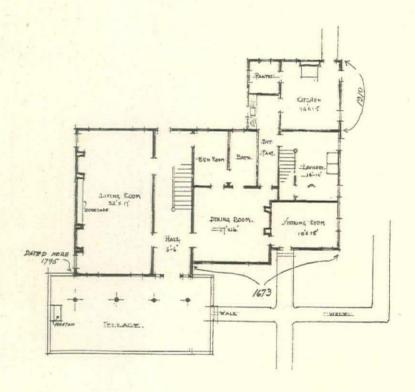


VIEW OF HOUSE FROM GARDENS-RESIDENCE OF GEORGE C. BOWEN, ESQ., PUTNAM COUNTY, N. Y. LA FARGE & MORRIS, ARCHITECTS.



THE OLD COW BAY MANOR HOUSE, WHITESTONE LANDING, L. I., NOW THE RESIDENCE OF ADDISON C. MIZNER, ARCHITECT.





FLOOR PLANS—THE OLD COW BAY MANOR HOUSE, NOW THE RESIDENCE OF ADDISON C. MIZNER, ARCHITECT, WHITESTONE LANDING, L. I. THE DATES ON THE FIRST FLOOR PLAN GIVE THE YEAR OF ERECTION OF DIFFERENT PARTS OF THE BUILDING.



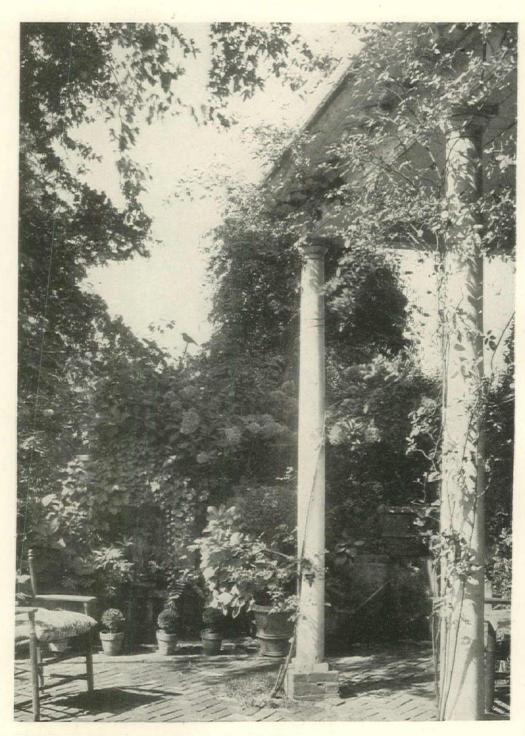
SURVEY OF THE OLD COW BAY MANOR, WHITESTONE LAND. ING, L. I., MADE IN 1748 TO DECIDE A BOUNDARY DISPUTE.



THE LOW PART OF THE HOUSE WAS BUILT IN 1673, AND THE "NEW" PART IN 1795, ALTHOUGH THE DOORWAY WAS NOT PUT IN PLACE UNTIL 1812. ORIGINALLY, THE PORCH HAD A RAILING AND WOODEN FLOOR. THESE WERE REMOVED BY MR. MIZNER, WHO ADDED THE TERRACE, WHICH IS EIGHTEEN FEET WIDE, OR THREE TIMES THE WIDTH OF THE ORIGINAL PORCH.



ENTRANCE DETAIL—RESIDENCE OF ADDISON C. MIZNER, ARCHITECT, WHITESTONE LANDING, L. I. THE DOORWAY WAS BUILT IN 1812.



PORTICO—RESIDENCE OF ADDISON C. MIZNER, ARCHITECT, WHITESTONE LANDING, L. I. THE LITTLE WALL FOUNTAIN WAS ORIGINALLY A SPANISH STOVE, OF BLACK FAIENCE. THE COLUMNS AND CAPS DATE BACK TO THE ORIGINAL HOUSE.



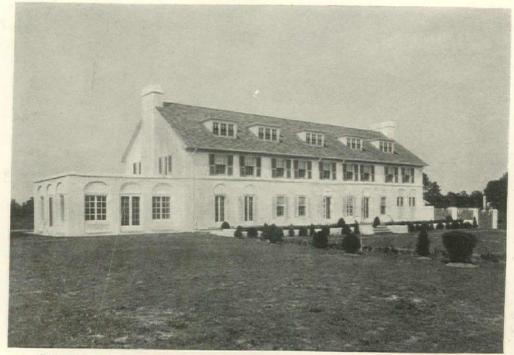
DINING ROOM—RESIDENCE OF ADDISON C. MIZNER, ARCHITECT, WHITESTONE LANDING, L. I. THE HESSIANS USED THIS PART OF THE HOUSE AS THEIR HEAD-QUARTERS DURING THE BATTLES OF LONG ISLAND.



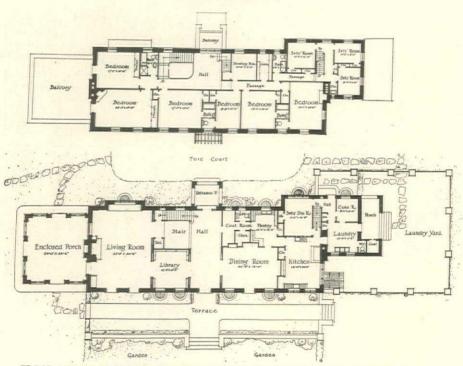
HALLWAY—RESIDENCE OF ADDISON C. MIZNER, ARCHITECT, WHITESTONE LANDING, L. I. THE PLASTERING OF THE HALL IS COLORED TO REPRESENT GRAY AND WHITE MARBLE. THE NATIVES SAY IT WAS ACCOMPLISHED BY RUBBING GUNPOWDER INTO THE ROUGH-FINISHED PLASTER.



NORTHEAST FRONT—ALLONBY, LAVEROCK, WHITEMARSH VALLEY, PA. JOSEPH PATTERSON SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



GARDEN FRONT-RESIDENCE OF WILLIAM M. McCAWLEY, ESQ., HAVERFORD, PA. D. Knickerbacker Boyd, Architect.



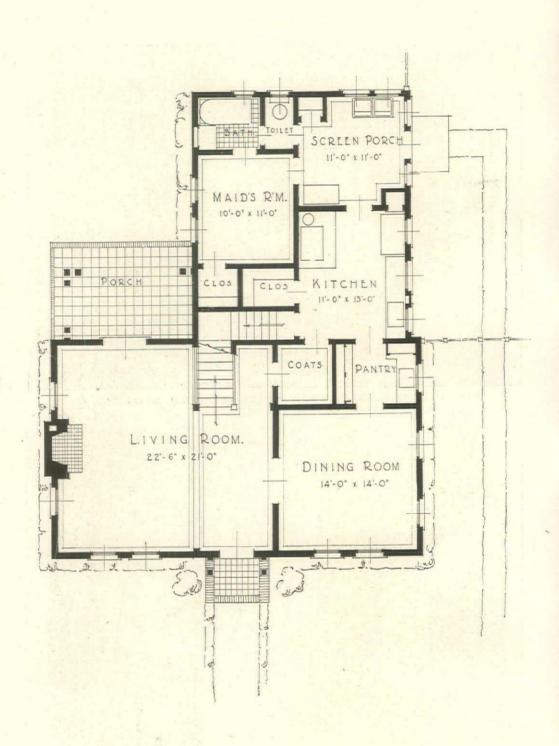
FLOOR PLANS—RESIDENCE OF WILLIAM M. McCAWLEY, ESQ., HAVERFORD, PA. D. Knickerbacker Boyd, Architect.



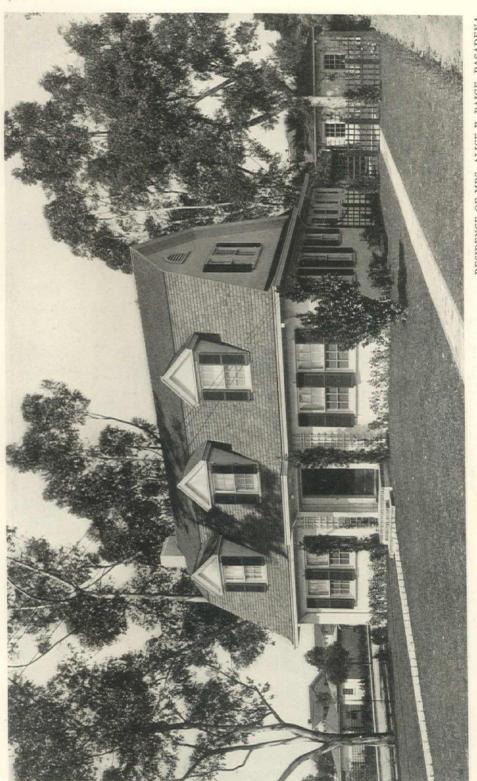
STAIR HALL—RESIDENCE OF WILLIAM M. McCAWLEY, ESQ., HAVERFORD, PA.
D. Knickerbacker Boyd, Architect.



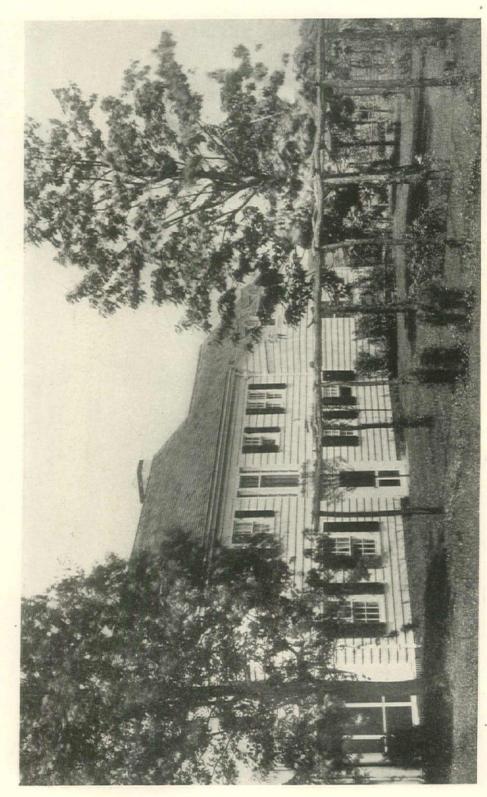
DINING ROOM—RESIDENCE OF WILLIAM M. McCAWLEY, ESQ., HAVERFORD, PA. D. Knickerbacker Boyd, Architect.



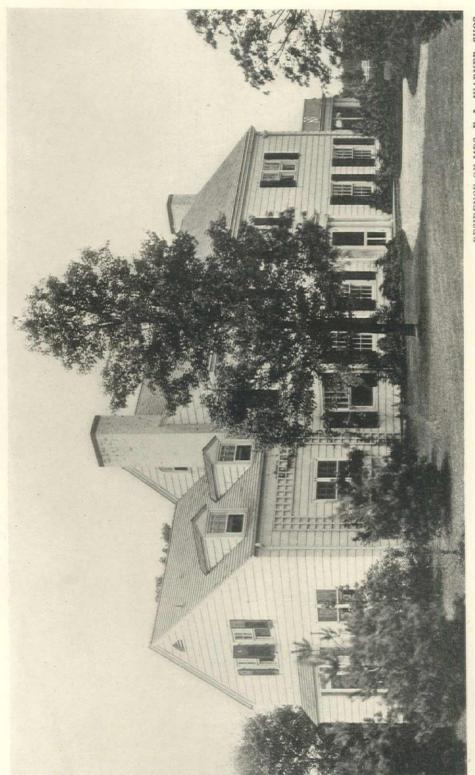
FIRST FLOOR PLAN—RESIDENCE OF MRS. ALICE P. PAIGE PASADENA, CAL. REGINALD D. JOHNSON, ARCHITECT.



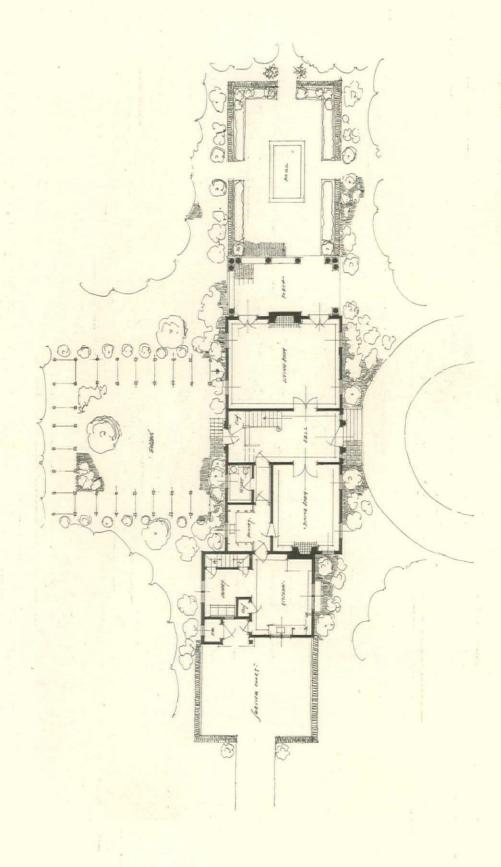
RESIDENCE OF MRS. ALICE P. PAIGE, PASADENA, CAL. REGINALD D. JOHNSON, ARCHITECT.



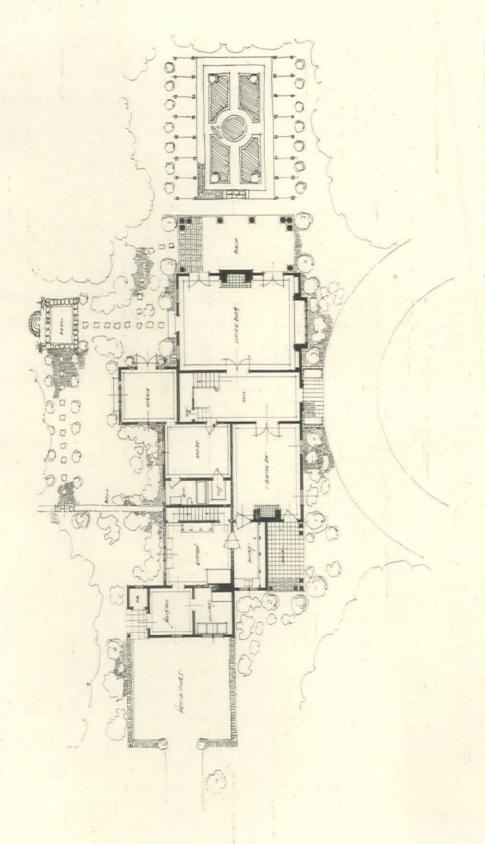
REAR VIEW—RESIDENCE OF MRS. E. L. WARNER, SYOSSET, L. I. J. W. O'CONNOR, ARCHITECT.



RESIDENCE OF MRS. E. L. WARNER, SYOS-SET, L. I. J. W. O'CONNOR, ARCHITECT.



BLOCK PLAN—RESIDENCE OF MRS. E. L. WARNER, SYOSSET, L. I. J. W. O'CONNOR, ARCHITECT.



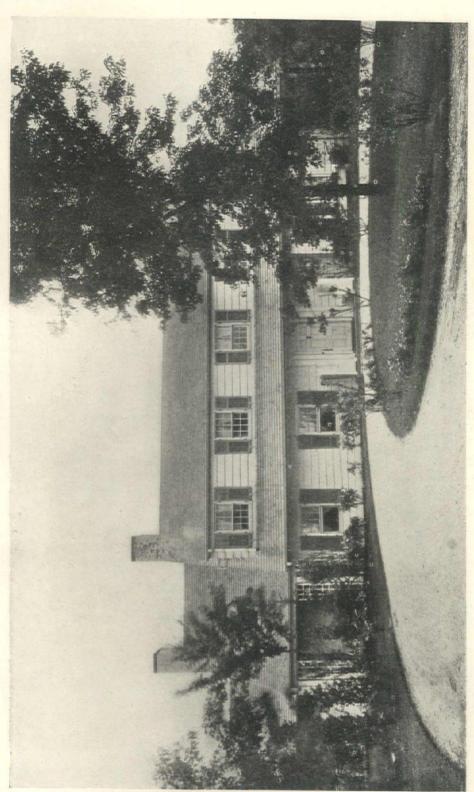
BLOCK PLAN—RESIDENCE OF H. W. WARNER, ESQ., SYOSSET, L. I. W. O'CONNOR, ARCHITECT.



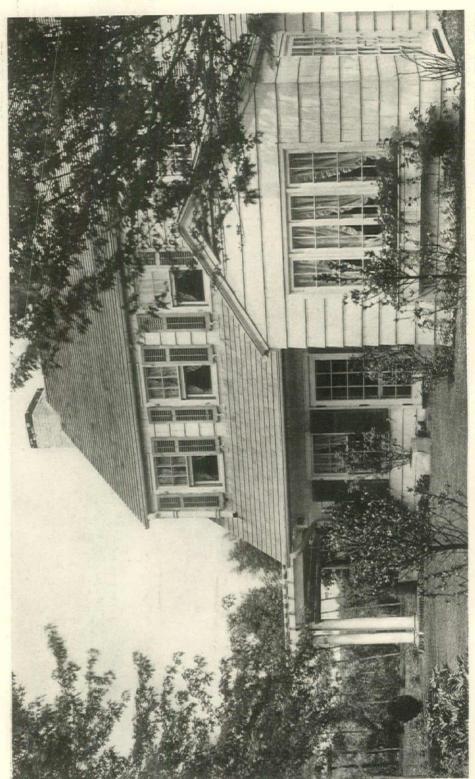
RESIDENCE OF H. W. WARNER, ESQ., SYOSSET, L. I. J. W. O'Connor, Architect.



RESIDENCE OF H. W. WARNER, ESQ., SYOSSET, L. I. J. W. O'Connor, Architect.



REAR VIEW—RESIDENCE OF H. W. WARNER, ESQ., SYOSSET, L. I. J. W. O'CONNOR, ARCHITECT.



RESIDENCE OF H. W. WARNER, ESQ., SYOS-SET, L. I. J. W. O'CONNOR, ARCHITECT.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BACH

Gurator, School of Architecture, Columbia University

Part V .- Furniture and Furnishings

OR our present purposes the word furniture must be given a very comprehensive definition. It will be found necessary to revert in great measure to the original significance of the word; that is, we must include under furniture anything that furnishes, and disregard the narrow meaning given to the word in modern general use, in which it embraces only the portable items of mobiliary art. We must eliminate, on the other hand, all elements of a stationary character, such as doorways, mantels, hardware, stair rails and similar characteristic features, not to mention other provinces in which carved, wrought and modeled work come into play; and we must also ignore many objects of the minor arts, such as table service and ware of various kinds, pottery, glass, textiles and the like, which contribute so largely toward the delightful atmosphere of our old houses.

Under the heading of minor arts we have in preceding issues of The Architectural Record already listed and reviewed a number of works bearing upon Colonial craftsmanship, both in a general

way and as illustrated more particularly in the smaller domains of pottery, of glassware and of silver and other metal work not distinctively architectural. Under the head of furniture, then, we shall indicate in the present paper the chief works dealing with the various mobiliary types and their use in furnishing. and those concerned with various kinds of carved, wrought and modeled work as used in the sense of architectural deco-The importance of the specific field of Colonial furniture and furnishings warrants the repetition of a number of titles previously mentioned in other connections. This is especially encouraged by the always increasing interest in the heritage of the soil, and particularly the cult of the type of charm and domesticity so thoroughly inherent in Colonial forms and craftsmanship.

We may subdivide our study, viewed from the standpoint of the books to be considered,—for the moment making no distinction between furniture and furnishings,—into four parts. The first comprises general informative works dealing with history, criticism, type and

class of pieces and their use, and in a broad way with the decorative back-ground of Colonial life. The second covers collections of photographs. The third embraces the paltry number of volumes whose authors have had the courage to explore the field from the instructive point of view of the scaled and measured drawing. The fourth includes the all too few works dealing with particular types of furniture pieces; and with these latter works we may group the limited number of monographs upon individuals and their work, outstanding figures of craftsmen who are chiefly responsible for the resource and expressiveness everywhere emanating from Colonial carving and workmanship, all bungling efforts of the uninspired carpenter notwithstanding.

Among the general informative works comprising the first division as above suggested, by far the best books are the following: Luke Vincent Lockwood's Colonial Furniture in America, in a new and greatly enlarged edition, with 867 illustrations of representative pieces (Folio; 2 vols., pp. xx + 334, ill., and pp. xviii + 307, ill. New York, Charles Sons; 1913. \$25); Scribner's Esther Singleton's The Furniture of Our Forefathers, with critical descriptions of plates by Russell Sturgis. (Quarto; eight parts with total of 664 pages and 346 plates and many text illustrations throughout; New York, Doubleday, Page & Company; 1900-1901. Out of print.) Both of these works are of sterling quality, considered both as to literary workmanship and as to presentation from the standpoint of bookmaking. They are admirably illustrated and so thoroughly cover the ground that the lack of any further publications in the furniture field might almost be condoned if only these are made available. The Lockwood volumes were first issued in much smaller compass in 1901, but now appear in a guise befitting the scholarly grasp of their author.

A book of this kind, maintaining so high a standard of performance, automatically becomes an example and sets a pace, as it were, for the entire field. We do not hesitate to accord the author and publisher alike the utmost credit for the

quality of production manifested in this work. Our only suggestion for its improvement would probably be found inapplicable. In this and in a host of similar works containing text illustrations the reader is bound to complain of the great weight of the volumes. American paper and binding too often produce a too heavy volume; European books in many cases reach but one-half or one-third the weight. This is often due, of course, to the use of inferior papers for the text portions, to the elimination of text illustrations, to the use of lighter and more easily warped covers, to the use of thin cloth and other bindings that show wear out of all proportion to their age, and finally to the practice of restricting illustrations to separate plates of different paper stock. This method of making a book has its advantages, to be sure, although the lay reader is apt to seek his illustrations very near corresponding text references. However, these difficulties are usually of a kind that must be controlled chiefly by the character and importance of the publication in question, or in more concrete terms, by the amount of money appropriated therefor, for the returns still figure too largely in publishers' minds to warrant a thorough consideration of matters of æsthetic importance; when the latter are given due regard we may expect an era of altruism for which America is not quite ready, or else such a price label on all our books as to make even the humble bibliophile suffer from that inveterate enemy, the high cost of living.

The other excellent work above mentioned, that by Esther Singleton on The Furniture of Our Forefathers, was issued in eight parts, each of a size to warrant its binding as a separate volume. Each part bears a sub-title and is restricted in its treatment to a separate field. The first concerns early Southern carved oak and walnut of the seventeenth century (pp. xii + 75 and 42 plates); part two, later Southern oak, walnut and early mahogany (pp. xii + 76 to 152 and 37 plates); part three, early New England imported and home made pieces of the seventeenth century (pp. xii + 153 to 233 and 42 plates); part four, Dutch and

English periods in New York from 1615 to 1776 (pp. xii + 234 to 312, and 43 plates); part five, New England from 1700 to 1776—imported and home made pieces of the eighteenth century (pp. xvi + 313 to 400 and 50 plates); part six, Chippendale and other great cabinet makers of the eighteenth century (pp. xv + 401 to 484 and 46 plates); part seven, domestic and imported furniture from 1776 to 1830 (pp. xiv + 485 to 568 and 43 plates); and part eight, woods, upholstery and styles of the early nineteenth century (pp. xiv + 569 to 664 and

43 plates, index).

One criticism of this series of parts is that the text becomes at times somewhat discursive; obviously, whatever there is of this character in the work, must be intentional and undoubtedly finds its appeal in certain places. Unfortunately our attitude in these papers compels a preference for a distinctively orderly mode of presentation, subject, to be sure, to the other criticism that the books we have most highly commended in these pages will be found from time to time to be too unimaginative or dry for any but the architectural student and the limited number of the serious cognoscenti. Nevertheless the Singleton book bears our unqualified commendation. However, the value of both this and the Lockwood books will surely be increased for the architect and furniture designer when used in conjunction with certain books of measured drawings to be noted in the following paragraphs. The Furniture of Our Forefathers has recently been republished in much smaller format, but in actual duplication, page for page and plate for plate, of the text and illustration contents of the first edition. judicious step on the part of the publishers will bring this valuable volume within reach of many for whom formerly the eight-part work proved too expensive, and furthermore the new volume is a much handier book for ready use. perial octavo; pp. and pl. as for larger edition. Garden City, L. I.; Doubleday, Page and Company; 1916. \$1.80.) This publication should find extensive use, despite some inferior reproductions made necessary by the price reduction.

Another group of volumes of decided interest and value, but with one exception, perhaps, again eschewing the measured drawing point of view, is that composed of Harold Donaldson Eberlein and Abbot McClure's The Practical Book of Period Furniture, treating of furniture of the English, American Colonial and Post Colonial and Principal French Periods (Octavo; pp. 371 and 66 plates, many text illustrations. Philadelphia; The J. B. Lippincott Company; 1915. \$6); Irving Whitall Lyon's *The Colonial* Furniture of New England in Use in the Seventeenth and Eighteenth Centuries (Small quarto; pp. xii + 285, and 113 plates. Boston; Houghton, Mifflin and Company; 1891); Mr. N. Hudson Moore's The Old Furniture Book, with a Sketch of Past Days and Ways (Octavo; pp. vi + 254; many illustrations. York; Frederick A. Stokes Company; 1903. \$2.50), and Frances Morse's Furniture of the Olden Time (Octavo; pp. xvii+371, many illustrations, index. New York; The MacMillan Company; 1913. \$3).

The first of these volumes, that by Eberlein and McClure, is distinctly a practical book of the practice of design in the "periods" of furniture it covers; it carefully adheres to a succinct grouping of characteristics and indicates easy methods of classification and identification, throughout suggesting a careful predigestion on the part of the authors, as the latter justly claim. As we have elsewhere pointed out (see notice of this book in the June, 1916, number of The Architectural Record), the most attractive feature of the book is the illustrated chronological key preceding the text. This is a series of nineteen plates containing on both sides well selected groups of objects indicating definite stylistic tendencies. Each plate bears as title a style name with inclusive dates, a suggestion of the chief materials in which furniture of that time was built, and a page reference to the text. Referring to the pages cited, the reader finds a chapter whose heading accords with that of the

plate in the key.

We are glad to emphasize especially the attention granted in this work to sec-

tions and profiles of details, which might with profit be given much more serious attention in many a publication devoted to furniture. It is our contention that many of the books destined either for the layman or for the expert in the first instance may be made more valuable if more material of technical or closely descriptive character were to be inserted for the former and more of general description or history were to be included for the latter. However, it seems that the layman consequently shies at the least vestige of a drawing which is not a sketch or at least a perspective and flatly denies all knowledge of the significance of the words elevation and plan, and, above all, section, which latter he regards as utterly inscrutable; while, on the other hand, the expert and artist dismisses too readily with a shrug all books which even a tutored layman can understand, as though to share his knowledge with the layman made him unclean as a designer.

The book by Lyon above included is a praiseworthy piece of work, limiting itself, however, to the New England area. Its seven chapters are headed with the names of the seven chief items of Colonial furniture, chests, cupboards, chests of drawers. desks, chairs, tables and clocks; beds alone are not considered, but the question of the design of the piece in so far as this concerns woodwork and especially wood carving here plays a smaller part, since the frame of the bed in our early times usually was concealed beneath a wealth of hood or canopy, valance and other draperies. In the other types of pieces shown the various methods of carving and other surface decorations are clearly reproduced, so that the illustrations achieve a particular value for this reason.

It might be interesting to note at this point that the author is a physician and that his work in the furniture field is due to a parallel interest; while Mr. Frederic William Hunter, whose fine book on Stiegel Glass was reviewed some time ago, is a New York lawyer. Unfortunately few of us ride our hobbies so well. Both of these gentlemen are to be highly commended for their good work of enlightenment, and both have

succeeded admirably. It is a good indication that each has seen to it that his text shall present a sterling calibre and high quality of English and that his illustrations shall be many and good. Hunter book contains plates in color, autochromes by J. B. Kerfoot; and the volume on New England furniture by Mr. Lyon presents no less than 113 exceptionally clear plates. The latter might serve as a splendid example of good reproduction and press work for many another book that must deal with so many objects decorated in complex design, easily lost in reproductions, requiring reduction down to even quarto proportions. not to mention the difficulties of pages of octavo or less.

Very good within the small compass allotted them are the other two volumes included in this group, Moore's The Old Furniture Book and Moore's Furniture of the Olden Time. Both make a more or less popular appeal, but assuredly this cannot be a fault if the misnamed popular aspect be properly construed. greater service can be rendered by any book than to popularize a form of art, and both of these volumes are popular only in so far as they seek to make their field interesting to the layman without undue stress upon details of manufacture or the technical intricacies of design and materials. They are books that the architect can read with profit.

In both cases the chapters of the works are given for titles the names of individual pieces, a method that is, of course, the first to suggest itself when so many different types of objects may be classed under a general inclusive term. What is more, this mode of treating the subject of mobiliary art is a thoroughly reasonable one, especially for our purposes, because detailed variations may be granted more adequate notice, and, when mentioned, are bound to receive better attention than would be accorded them if noted as part of a general discussion covering a variety of motives or pieces. It should be noted in passing that, quite obviously and as their titles indicate, all works mentioned in these pages are not concerned exclusively with furniture in the sense of portable objects, nor do they

all restrict themselves to Colonial furniture. In all cases the study of either furniture or furnishing demands a certain amount of complementary reference to all elements contributing to decoration in order to give due weight to the discussion in hand, or else the effect is that of the frame without the picture or vice versa.

We are of the opinion that the modern public can make use of many volumes written along the lines of the last two noticed, and this is especially impressed upon those of us whose walks in life prompt an observation of the growth of public taste. For such students of civilization it is quite clear that public taste has improved within the last ten or twenty years at a rate far in excess of that demonstrated by any corresponding period in our national history. One of the most salutary evidences of this growth of taste is to be seen in the improvement in interior decoration, notably in arrangements disposed according to so-called periods or styles; another manifestation is that connoted by the always increasing desire to give the old Colonial type of furniture and furnishing an adequate opportunity to carry through its logical development on its own soil, and without regard to the various interloping style vagaries harbored by an æsthetically ill-starred nineteenth century; and finally, perhaps the best indication of the growth of public taste as suggested along either of the directions just noted, is to be seen in the greatly increased number of persons who regularly visit art libraries, museums, and art collections exhibited before their public sale, and in the serious study given to periodicals, especially in the field of architecture and decoration, by the allegedly ignorant layman, who, we shall soon be obliged to admit, was maligned by artists and critics for perhaps a decade while he sought in a quiet manner the proper means of improving

Our review of this field of the general books would not be complete without due mention of several volumes whose titles give prominence to the word architecture, but whose contents cede the necessary space for short treatments of

furniture. Obviously any historical or otherwise comprehensive survey of the field of Colonial architecture must include an account of interiors and, to a great extent, likewise of doors and doorways, mantels, stairways, paneling and possibly even metal work. Especially valuable from this point of view are Harold Donaldson Eberlein's The Architecture of Colonial America (Octavo; pp. xiv + 289, illustrations, index. Boston; Little, Brown and Company; 1916. \$2.50), an excellent volume of its kind and the pioneer general history of Colonial architecture; Aymar Embury's The Dutch Colonial House, Its Origin, Design, Modern Plan and Construction (Large octavo pp. 6+iv+108, ill. New York; McBride, Nast and Company; 1913. \$2), which covers a limited field, restricting itself to one type only, but which happily covers the furniture types available for the style discussed; Mary Harrod Northend's Colonial Homes and Their Furnishings (Crown octavo; pp. xxi+252, ill., and 117 plates, index. Boston; Little, Brown and Company; 1912. \$5), a fine piece of research with thoroughly interesting illustrative material; the same author's Historic Homes of New England (Crown octavo; pp. xvi + 274, ill., and 95 plates, index. Boston; Little, Brown and Company; 1914. \$5), which likewise deals largely with furniture backgrounds; and, finally, Herbert C. Wise and Ferdinand Beidleman's Colonial Architecture for Those About to Build, being the best examples-domestic, municipal and institutional-in Pennsylvania, New Jersey and Delaware, with observations upon the local building art of the eighteenth century (Square crown octavo; pp. xv + 270, with 207 ills. Philadelphia; The J. B. Lippincott Company; 1913. \$5), which is a thoroughly useful volume from the point of view of our present study, the illustrations being particularly clear. All of these volumes have been noticed at length in earlier parts of this series of reviews on the literature of Colonial architecture.

Of interest likewise, with regard to furniture backgrounds and the æsthetic side of furnishing as a decorative art, are two other classes of books, namely, those

devoted to interior decoration and to the so called "periods" in furnishing, and those of a thoroughly popular but none the less informative type that have been referred to as "chatty" books. In the first class we might mention, by way of example only, for there are quite a number of works that might be grouped with them, Helen Churchill Candee's Decorative Styles and Periods (Octavo; pp. xii + 298, ill., New York; Frederick A. Stokes Company; 1906. \$2.15), and Virginia Robie's Historic Styles of Furniture (Square octavo; pp. viii + 196, many ills. New York; The Houghton, Mifflin Company; 1916. \$3). Books of this kind cover a province that offers a special sphere of activity for women, and the names of their authors will be found to be largely those of women. Unfortunately too many books of this kind are but regurgitations, compilations of material from the same time-worn sources, with a minimum addition of personal or characteristic viewpoint. Both of the volumes just mentioned will be found to have a more lasting value than the majority of their compeers because of the point of view adopted and because of the good English used as a We might, of course, extend the list of books on decoration ad infinitum, but the specific Colonial viewpoint, even as maintained in one or two chapters, is soon lost in the melée of the battle of the styles.

The second group of possible additions to our list is of the type of The Quest of the Colonial (Octavo; pp. ix + 425, ill., with many photographs, and with decorations by Harry Fenn. New York; The Century Company; 1907. \$2.40), by Robert and Elizabeth Shackleton, or by the same authors, The Charm of the Antique (Octavo; pp. viii + 300, many ills. New York; Hearst International Library Company; 1914. \$2.50). The first of these is a narrative of personal experience and gathers interest for that reason; the second is a more serious study, or at least appeals to us in that manner. Both will merit the attention of the reader of these pages; their seeming discursiveness will prove in the end a meritorious and engaging characteris-

tic. The former subdivides its subject matter first in accordance with localities visited in the quest for original Colonial objects of the minor arts ultimately to be used in furnishing the author's residence, itself an old-time house, and secondly, according to the individual rooms decorated showing correct stylistic adaptations in furnishing, using original pieces almost exclusively. There is in each of these volumes an interesting discussion for collectors concerning the troublesome matter of fakes and how to detect them. There is also a good index in each and the illustrations are plentiful and of good quality. We cannot help wishing, however, that in most cases of reproductions of the minor arts, fewer pieces were grouped together on a single plate; and furthermore, that some indication of actual sizes be given the reader by the use of a scale to aid his visualization. It is high time that readers themselves grasped the significance of the simple, direct and altogether useful expedient of the scale indicator at the corner of a plate to show the degree of reduction necessary when the picture was taken. In all types of fine art objects, especially those including the third dimension, the matters of comparative sizes and of proportionate relations adhered to in distribution of objects are of the utmost importance, and our books too frequently leave the visualization of true sizes entirely to the reader or confuse him by figures in the text, which, in the case of the lay reader, especially, must be checked up by dimensions within his experience. This difficulty is of much smaller import, of course, for the designer or architect for whom practical considerations make a constant reference to sizes obligatory; yet the professional designers are the first to appreciate the aid of scale indication in illustrations.

The second volume by these authors weaves a befitting halo about the subject of the antique with reference chiefly to its charm and the reason for its appeal, which the writers analyze from various angles, basing their discussion upon their own well trained appreciation and arousing in the reader an unconscious enthusiasm which has, perhaps, long been

latent within him, as it is in most cultured persons among us, even though we may foster no decided art interest. The illustrations in this volume are of surpassing quality, higher in this respect, in fact, than one usually finds in works of this price and general appeal. It is a wise publisher who decides that the best plates and reproductions are none too good for the book destined to elevate our national appreciation and enjoyment of the beautiful, especially the beautiful as illustrated in the works of our own early history. We heartily commend both of these volumes by the Shackletons for their general make-up, their point of view, their understanding treatment of a fascinating field and, last but most important, their excellent literary style, the vehicle which carries home to the intelligent reader the author's own pleasure in the charm and savor of our early craftsmanship.

Perhaps we should here mention once more Mr. Walter Alden Dyer's The Lure of the Antique (Octavo; pp. xii + 499, many ills. New York; The Century Company; 1916. \$2.40), and also Harold Donaldson Eberlein and Abbot Mc-Clure's The Practical Book of Early American Arts and Crafts (Large octavo; pp. 339, many ills. Philadelphia; The J. B. Lippincott Company; 1916. \$6), both of which were reviewed at length in the January number of The Architectural Record and were then, and properly, regarded as the best inclusive works on the general subject of all the minor arts in Colonial times and the formative years that immediately followed.



A History of Ornament, Ancient and Medieval. By A. D. F. Hamlin. 40 ills. and 22 plates, 392 pp., 534 by 8½. New York; The Century Co. \$3 net.

Lombard Architecture. By Arthur Kings-

Lombard Architecture. By Arthur Kingsley Porter. Volume II., Monuments: Abbazia di Albino, Milan. 675 pages, 7 by 10½. Volume IV., portfolio of 244 plates. New Haven; Yale University Press.

City Residential Land Development: Studies in Planning. Edited by Alfred B. Yeomans. 75 ills., 138 pp., 9 by 12. Chicago; the University of Chicago Press. \$3.

Building Code Recommended by the National Board of Fire Underwriters. 4th Edition, completely revised, 1915; 45 ills., 326 pp.; 5 by 7½. New York; National Board of Fire Underwriters.

George Edmund Street: Unpublished Notes and Reprinted Papers with an Essay by Georgiana Goddard King. 13 ills., 345 pp., 5½ by 8½. Publication of The Hispanic Society of America, No. 100. New York; G. P. Putnam's Sons. \$2.25 net.

Dwelling Houses: A Code of Suggestions for Construction and Fire Protection. Recommended by the National Board of Fire Underwriters; 21 plates, 115 pp., 6 by 9. New York; National Board of Fire Underwriters.

Hospital Sketches. By Robert Swain Peabody. 24 ills., 95 pp., 5½ by 8¼. Boston and New York; Houghton, Mifflin Co. \$1.50 net.

The Garden Blue Book. A Manual of the Perennial Garden. By Leicester Bodine Holland. 200 ills. and color chart, 425 pp., 7 by 10 inches. Garden City, N. Y.; Doubleday, Page & Co. \$4 net.

Handbook for Architects and Builders.
Published under the Auspices of the
Illinois Society of Architects. Volume
XIX, 1916.



Style in Men and in Architecture. One hundred and fifty years ago Lord Chester-field, in his famous precepts on refinement and good manners, addressed to his son, made use of the following comparison, which was read-

ily appreciated in an age when every man of breeding was supposed to be well grounded in the art of architectural design:

"I dare say you know already enough of architecture to know that the Tuscan is the strongest and most solid of all the orders; but at the same time it is the coarsest and clumsiest of them. Its solidity does extremely well for the foundation and base floor of a great edifice; but if the whole building be Tuscan, it will attract no eyes, it will stop no passengers, it will invite no interior examination; people will take it for granted that the finishing and furnishing can not be worth seeing, where the front is so unadorned and clumsy. But if upon the solid Tuscan foundation the Doric, the Ionic and the Corinthian orders rise gradually with all their beauty, proportions and ornaments, the fabric seizes the most incurious eye, and stops the most careless passenger, who solicits admission as a favor, nay, often purchases it. Just so will it fare with your little fabric, which at present I fear has more of the Tuscan than of the Corinthian order. You must absolutely change the whole front or no one will knock at the door. The several parts which must compose this new front are elegant, easy, natural, superior good breeding; and an engaging address; genteel motions; an insinuating softness in your looks, words and actions; a spruce lively air and fashionable dress; and all the glitter that a young feilow should have."

While Lord Chesterfield selected what he considered to be good architecture as the model on which his son should base his appearance and deportment, it remained for the late John Wellborn Root, an architect who, in his private life, exemplified all these qualities, to offer the converse of this proposition to the young and aspiring architects of the Chicago Architectural Club in 1887. In a paper on "Style," he showed how similar qualities in a man should be the models for works of architecture that are to be the embodiments of "style," in the broadest meaning of that word. therefore is evident that such qualities are coordinated with regard both to men and architecture in the opinion of these authorities. For Mr. Root said as his opening proposition:

'The arts, architecture among them, have been called polite. Perhaps, in the earlier stages of the polite arts, architecture takes precedence of all others. Painting and sculpture began their career with no distinct debt to humanity; but architecture was, at its birth, shouldered with a large obligation, which it was in decency compelled to pay. Every house built to shelter man from the elements was a thing not to be avoided by its neighbors. It not only partially shut out from them grass and trees, and sun and sky, but, by virtue of its very bigness and fixity, it became, whether a thing of beauty or not, a thing of prominence. This fact has caused architecture to be defined as the 'politeness of building.'

"Accepting this definition as sound, let us note some of the qualities which we find in a gentleman, as we understand the term, and see if they are not equally applicable to good buildings. These are: Repose, refinement, self-containment, sympathy, discretion, knowledge, urbanity, suavity, modesty."

Then he enlarged on each of these propositions.

Repose.—Quietness of body and mind; not phlegmatism, but enforced quietness, as in the poise of a gladiator. The mind becomes finely receptive when held in this calmness of attitude.

Refinement.—In which all things tend toward the loss of asperity, not loss of power nor of value; gaining in that smoothness of surface, that crystallineness of composition which gives added currency and beauty to the thing refined.

Self-containment.—Which avoids a tooready utterance of the momentary thought; which spares other people a swift infliction of all of our knowledge; which inwardly debates before answering grave

questions.

Sympathy.—Which "puts yourself in his place"; which readily accepts a point of view; which quickly adjusts itself to its environment; which gives gravity for gravity, lightness for lightness, tears for tears, laughter for laughter.

Discretion.—Which seeks always the fitting thing to do, thus supplementing sympathy; which holds its tongue when speech is unnecessary; which knows nothing when

forgetfulness is a virtue.

Knowledge.—The care of speech; the loving selection of words; the scrupulous nicety of grammar, the fullness of idea of illustration that decorates each subject touched.

Urbanity.—As the name suggests, a qual-

ity begotten in cities.

Suavity.—The faculty of avoiding friction; the knack of easily getting about in crowds of men; the attitude of deference to their weaknesses; the power, without creating offense, to ward off their aggression.

Modesty.—Without which all other good qualities may become offensive. Not affected modesty; not Uriah-Heepness, but the genuine self-esteem which, in justly valuing self, puts as well a just value on others, and thus confesses that self is small

in many comparisons.

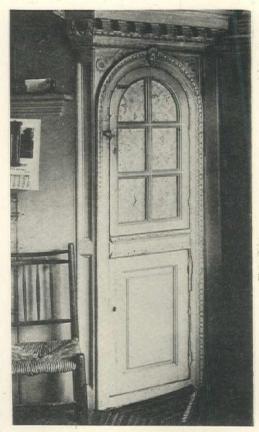
"Now, what are these qualities in men that they are not in buildings? Their sum total makes a perfect gentleman. The sum total of their analogues makes a perfect building. You may leave out several of them from a man's composition, and still leave him a very good fellow; so from buildings a number of these elements may be omitted and still the design not be utterly damned."

This was said nearly thirty years ago. Most of the young men addressed are now in middle age and active practice, and it would be interesting to know how far the precepts laid down by Mr. Root have been fulfilled in actual practice.

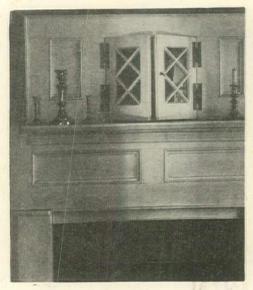
P. B. W.

Old Chimney Cupboards. The chimney cupboards found in old time houses vary all the way from a mere recess, sometimes without even the protecting door, to a most carefully designed architectural feature.

The typical early chimney, in rooms with a capacious fireplace, narrows markedly as it extends toward the roof. Most of the old chimneys start from the cellar, either from a solidly built foundation or an arch with heavy side walls, the arch itself forming a convenient space for shelves. In the case of one noteworthy exception which has come under my notice, the chimney starts from a ledge about four inches wide and eight feet long, built into the cellar wall; from this narrow ledge the chimney arches upward and forward till it strikes a heavy beam about five feet from the cellar wall, and from this insecure foundation it rises to the roof.



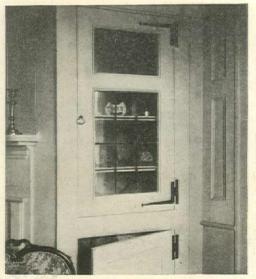
ACCORDING TO TRADITION, THE DECORATION ON THIS CUPBOARD WAS MADE BY A CHANCE VISITOR IN PAYMENT OF HIS BOARD BILL.



THIS FORM OF CUPBOARD, BESIDES BEING USEFUL, FURNISHED AN INEXPENSIVE DEC-ORATION FOR THE CHIMNEY BREAST.

The fireplace did not, as a rule, occupy entirely the immense width of the chimney; space was left on one or both sides for a small cupboard, which the housewife found very useful in the severe winter climate of the North. Frequently, however, the cupboard was a later contrivance. The great open fireplaces were enormous devourers of wood. The nearby forests were being rapidly thinned out, even in the early days; and this led to economy in the use of wood. Fireplaces were made smaller to conform to the necessities brought about by the dwindling forests. A reduction in the size of the fireplace was accomplished by building on each side of the opening a breastwork of brick, from the edges of which side walls were built extending backward and somewhat inward to the rear wall or fireback. These inner side walls, in many cases, were run up some feet and then left open at the top, thus forming with the remaining walls a well at the side of the fireplace.

Not infrequently this well was arched over from front to back, and here was the beginning of a chimney cupboard. All that was necessary was to break into the exterior wall, arch over the top of this opening and the cupboard was formed. A few



UPPER AND LOWER CUPBOARDS WERE FRE-QUENTLY LINED INSIDE WITH WOOD TO COVER UP THE ROUGH CHIMNEY BRICKWORK.

shelves and a door were added, and a more finished product was then had. More often than not a middle arch was inserted, making an upper and a lower cupboard, both of which were found most useful in the household economy. Eventually, however, some of them were abandoned by the thrifty housewife as dirt traps; more commodious conveniences took their place and they were bricked up or otherwise covered in and forgotten, only to be discovered by accident when repairs are being made.

GEORGE W. NASH.

Editor of The Architectural Record:

I have to inform you that the Government installed 14th November, 1916, has now, because of war conditions, indefinitely postponed the reception of designs in the Federal Parliament House Architectural Competition.

The Minister has arranged for the registration of competitors to be retained, and states that it is intended to complete the adopted programme as soon as the time is

Yours faithfully, opportune.

W. B. GRIFFIN. Federal Capital Director of Design and Construction. Melbourne, Australia, Dec. 13, 1916.



Target and Arrow Roofing Tin



STATE COLLEGE FOR TEACHERS, ALBANY, N. Y.

Architects—Geo. L. Heins, State Architect; Albert R. Ross, New York State Board of Education. General Contractors—A. E. Stephens Co., Binghamton, N. Y. Sheet Metal Contractors—McNee & Rabe, Albany, N. Y.

A GOOD illustration of the effect obtained by applying tin roofing over wood ribs. This is a type of roofing that is coming more and more into general use for monumental buildings of all kinds. It serves to combine all the practical advantages of good, durable roofing tin, with distinct artistic merit.

We have full size working drawings describing in detail the method of applying this type of roofing and shall be glad to send these to any one interested, upon request. These drawings will also be found among the service sheets contained in the portfolio issued by the Architectural Service Corporation, Philadelphia.

"TARGET AND ARROW" roofing tin is a specialty of ours, handed down from the early days of our business. In this brand we have preserved an old-time standard for the use and benefit of present-day architects. Few building materials have had so thorough a test of time as "TARGET AND ARROW" roofing tin. It remains to-day the same durable quality that we have supplied to American sheet metal workers for nearly a century. It costs a little more than other roofing tin, so you are not likely to get Taylor quality if you write a specification that permits substitution. "TARGET AND ARROW" roofing tin is sold at a fixed resale price to protect you against the possibility of overcharge where called for alone.



In your specifications for sheet metal work, where roofing tin is required, simply call for Taylor's "TARGET AND ARROW" brand to be laid in accordance with the standard working specifications of the National Association of Sheet Metal Contractors. With a responsible roofing contractor such a specification will secure you tin roofing work of the standard that has made the old-time roofing tin a watchword for durability and all-round satisfaction and service.

We furnish, upon request, copies of this standard tin roofing specification form, also some instructive literature telling about this old-time product.

Our catalog is in Sweet's-all issues.

N. & G. TAYLOR CO., Philadelphia

HEADQUARTERS FOR GOOD ROOFING TIN SINCE 1810

Color Aggregate Stucco

Our experiments in toning white stucco by means of colored marble and granite screenings, colored sand and gravel, etc. have progressed far enough for us to call attention to the results attained—stucco variegated in tone and with a decided charm of texture, life and character.

COLOR TONES IN STUCCO

A number of our experimental panels have been reproduced in full scale and colors in a monograph, "Color Tones in Stucco." There are included notes on the experiments, formula for each panel, a suggestive list of aggregates, and a convenient guide to the preparation of specifications. Your copy of this monograph will be mailed upon request. Use coupon below.

The Atlas Portland Cement Company

Members of the Portland Cement Association

New York Chicago Philadelphia Boston St. Louis Manneapolis Des Moines Dayton

ATLAS WHITE

THE ATLAS PORTLAND CEMENT COMPANY, 30 Broad St., New York, or Corn Exchange Bank Building, Chicago Send me your monograph "Color Tones in Stucco" and place me upon your mailing list for other books on stucco research and experiments, as issued.

Name______ Address_____

AMERICAN BRIDGE COMPANY

HUDSON TERMINAL-30 CHURCH STREET, NEW YORK

Manufacturers of Steel Structures of all classes particularly BRIDGES AND BUILDINGS



William Penn Hotel Pittsburgh, Pa.

SALES OFFICES

U. S. Steel Products Co. . . Pacific Coast Dept. SAN FRANCISCO, CAL. . . . Rinhto Building Portland, Ore. Selling Building Seattle, Wash. . 4th Ave. So., Cor. Conn. St.

Export Representative: United States Steel Products Co., 30 Church St., N. Y.

Finish of fine woods

You devote a great deal of time and study to the selection of woods for floors, for interior trim and exterior use.

How beautifully the grain of these woods is brought out and how long the beauty lasts - depends upon the quality of varnish you use.

Your safe guide to good varnish is the name of the maker.

Murphy Varnish "the varnish that lasts longest"

is made by the maker who, for the past 50 years, has been furnishing the most expert users of varnish - manufacturers of fine furniture and fine pianos - with their best varnishes.

Our architectural varnishes and enamels are equally good and have been specified by architects for years. Our principal architectural products are:

Murphy Transparent Interior Murphy Semi-Gloss Interior Murphy Transparent Floor Murphy Univernish

Murphy Transparent Exterior Murphy White Enamel

Murphy No-Gloss Interior

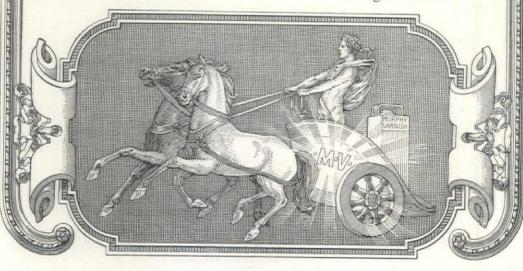
Murphy Enamel Undercoating

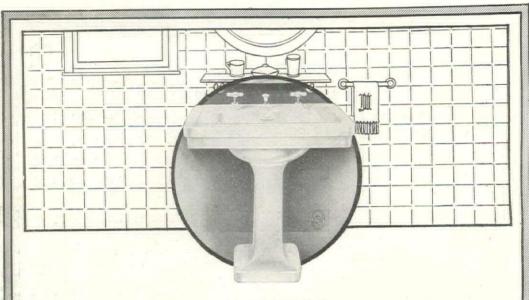
Murphy Varnish Company

Franklin Murphy, jr., President

Newark New Jersey

Chicago Illinois





BEAUTY

in the bathroom counts for much; sanitation for more; but individuality is looked for most!

THESE three essentials for correct bathroom planning are found in the superlative degree in the new line of Thomas Maddock's

MADBURY LAVATORIES

Here you will find a combination of the highest accomplishments in lavatory construction. Quality, sanitation, utility, and service—these are ably reflected in the Madbury line, helping architect and owner, alike, to attain The Perfect Fixture. Individuality, though, is the keynote of the Madbury line. The integral supply feature, the overflow cleansing device, the square bowl—these are but a few of the many distinctive advantages found only in Madbury Layatories.

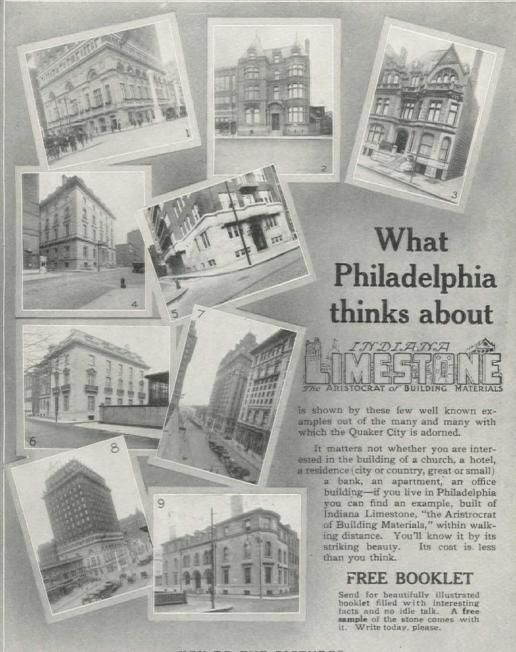
There is a Madbury Lavatory for any bathroom need.

Send for new booklet: "Bathroom Individuality—a suggestion." It tells you all about the line you have always wanted. Address Dept. A.

THOMAS MADDOCK'S SONS CO.

New York Office 30 E. 42d Street TRENTON, N. J.

Chicago Office 14 E. Jackson Street



KEY TO THE PICTURES

- 1. Ritz-Carlton Hotel (detail) 4. Union League 7. Bellevue-Stratford Hotel
 2. F. S. Darley Home 5. Wardstone Apartments 8. Ritz-Carlton Hotel (general)
 3. John Wanamaker Home 6. T. W. Cramp Home 9. G. W. Childs Home

Indiana Limestone Quarrymen's Association BEDFORD, INDIANA BLOOMINGTON, INDIANA

P. O. Box 202

MAY we send you a copy of our monthly magazine, Atlantic Terra Cotta?

The February number illustrates Atlantic Polychrome Terra Cotta in five colors.



Please mention The Architectural Record when writing to us.

Atlantic Terra Cotta Company 1170 Broadway, New York

Copyright, 1917, Atlantic Terra Cotta Co.

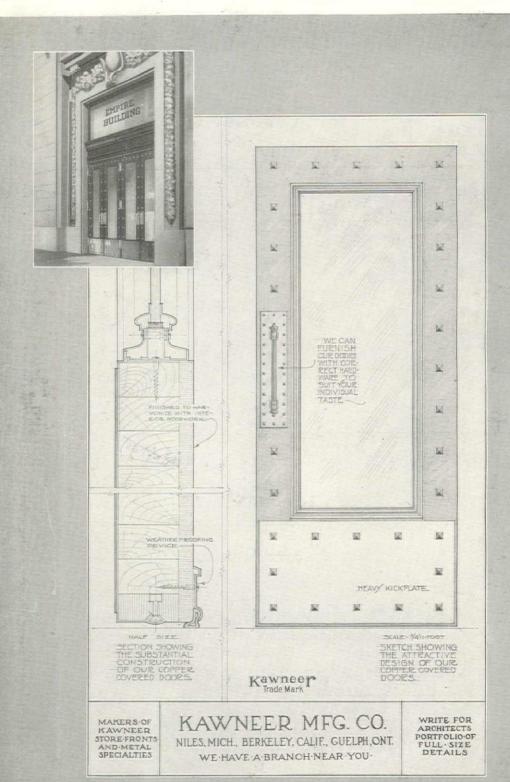
The Standard of Quality in Brick



Mount Calvary Episcopal Church, St. Louis
Hellmuth & Hellmuth, Architects
Hy-tex Georgian Colonials laid in running bond with flush cut, gray mortar-joint

In using Hy-tex, the architect takes advantage of the utmost possibilities in color-tone and surface-texture, besides having expert co-operation and securing responsible service. Apply to us or any of our Branch Offices for literature or samples.

HYDRAULIC-PRESS BRICK COMPANY ST. LOUIS



AMERICAN

SASH CHAIN

and FIXTURES

American Sash Chain sizes are standardized to correspond with the weights of sash for which they are intended:

No. 60 for 60 pound double-hung sash.

No. 80 for 80 pound double-hung sash.

No. 100 for 100 pound double-hung sash.

No. 130 for 130 pound double-hung sash.

No. 250 for 250 pound double-hung sash.

GUARANTEE

We will replace any American Sash Chain that fails in service when carrying the weights of sash as specified in list, and when properly installed.

American Steel Sash Chain is made from the best steel stock obtainable. The links are carefully designed, and the stock so evenly distributed as to give the greatest strength. Made in the following finishes: Bright, Copper, S. R. P., Hot Galvanized, and Hercules. S. R. P. is our Special Rust-Proof finish and is superior in finish and appearance to Sherardizing.

American Bronze Sash Chain is made of our own special mixture of hard bronze, adopted only after exhaustive tests demonstrated that it was the best alloy possible to produce for this purpose. Positively non-corrosive and unexcelled in strength and durability.

Write for samples and prices

AMERICAN CHAIN COMPANY, Inc.

BRIDGEPORT

CONN., U.S.A.

Largest Manufacturers of Chain in the World



Stair rail fittings for public buildings

should be made of metal and should be smooth at the joints



thus providing a hand rail without uneven surfaces, and eliminating to some extent the possibility of accidents. As a center stair rail it is highly important and should be installed on all stairways wide enough for several persons to pass hurriedly, as the rail affords each person suitable protection and support against falling.

CRANE

FLUSH JOINT

RAILING FITTINGS

FOR SCHOOLS AND PUBLIC BUILDINGS

are made with an extension, or connector, over which the pipe is tightly driven up to the face of the fitting (see illustration above) forming a smooth, flush joint.

Our large variety of patterns enables us to furnish railing fittings that will cover all requirements and specifications.

FOUNDED BY R. T. CRANE, 1856

CRANE CO.

Send for Circular 58D

836 S. MICHIGAN AVE.

Branches in 52 leading cities



Architect-Marshall Miller, Y. M. C. A., MEXICO CITY Contractor-William P. Carmichael

CORRUGATED BAR Construction Tested by Modern Artillery

Through the concrete walls of this building are the holes made by solid shells. The work performed by the reinforcement is plainly seen where the walls have been pierced. An ordinary building would have been destroyed. This building was put into use again at a comparatively small expense.

Our booklet gives interesting details of reinforced concrete construction in modern buildings:



CORRUGATED BARS for Reinforcement
"They can't Slip—
See the Ribs!"

A Special Series of Bulletins Shows
Factory Buildings
Warehouses
Hotels

Machine Shops
Office Buildings
Hospitals

Mention of your interest in connection with immediate work will be appreciated.

Corrugated Bar Company

Buffalo, N. Y.

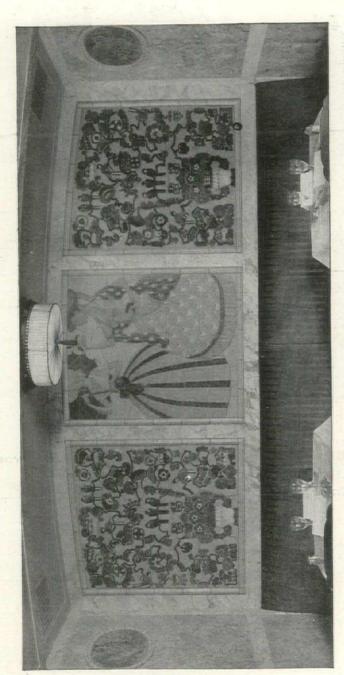
New York Philadelphia

Chicago Det

Detroit Boston

Syracuse

St. Louis



THIS ILLUSTRATION SHOWS ONE OF THE FAIENCE MURAL PANELS IN THE DECORATION OF THE LADIES, RESTAURANT OF THE CAFE SAVARIN, J. J. PETIT, ARCHITECT; EXECUTED BY US FROM DESIGNS OF MESSRS, KNUD LAUB AND FRANZ HELVING.

The Rookwood Pottery Company, Cincinnati, Ohio



STEEL and IRON PIPE

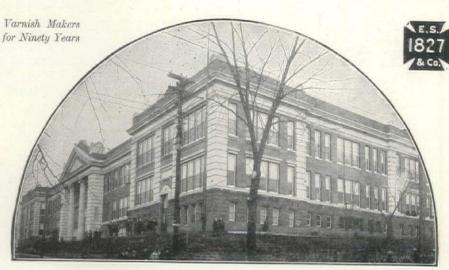
In the heated contention over the relative merits of steel and iron pipe, this company has no selfish interest, since it manufactures both in all sizes and for all purposes.

This being the case, it may interest architects to know that for all ordinary heating and plumbing installations we recommend the use of steel pipe. This is chiefly because of its somewhat lower cost. Careful investigation indicates that, under similar conditions, it renders equal service.

But steel pipe or iron pipe, if it is to give good service, must be well made from suitable materials.

THE YOUNGSTOWN SHEET AND TUBE CO YOUNGSTOWN, OHIO





Pittsburgh High School, Austin Reiley, Wilkesbarre, Pa., Architect. Walter S. Barrett, Painter.

Finished Throughout with

EDWARD SMITH & CO.'S VARNISHES

In points of service and excellence of finish, Edward Smith & Co.'s Varnishes can be relied upon to meet the exactions of your most particular client.

They are made in anticipation of the conditions peculiar to their use.

We shall count it a privilege to serve in an advisory capacity, designating the right varnish for a specific purpose and thus insuring the most satisfactory results for yourself and client.

Write for Finished Panels.

Edward Smith and Company

West Avenue, 6th and 7th Sts., Long Island City, N. Y. P.O. Box 1780

Western Branch, 3532-34 S. Morgan Street, Chicago, Ill.

Check Up On Weight



Judge metal lath by weight and gauge, not by gauge Weight assures alone. extra strength.

SYKES

EXPANDED CUP METAL LATH

Self Furring

The Self-Furring Lath that saves 5 to 10 cts. a sq. yd. because no furring strips are needed—gives you more weight than other metal laths of the same gauge because Sykes has wider strands.

THIS ASSURES MORE STA-BILITY, and you will also find that Metal Lath and Stucco is easier to apply when no Furring Strips are used.

Approved by architects and U. S. Government.

Write for Booklet giving Specifica-tions for Stucco on Metal Lath.

Metal Sykes and Roofing

510 River Road Warren, Ohio

A Most Helpful Catalog

PLANTS, SHRUBS AND TREES!

AT last a book has been written which tells what trees are best adapted by nature for each garden and landscape purpose. What shrubs and trees most effectively group together. "Suggestions for Effective Planting" is descriptive of the well-known orna-mental trees and shrubs grown at Andorra Nurseries.

This is not the usual mechanical, deadly dull nursery list. To read it is like discussing in a friendly way what the place needs.

This book is yours for the asking. Send for your copy at once.

Andorra Nurseries

William Warner Harper, Proprietor Box 50, Chestnut Hill, Phila., Pa.

TRIANGLE



MESH

Concrete Reinforcement

For Pavements and Roadways, and Building Construction

Made by

American Steel & Wire Company

Chicago New York Cleveland Pittsburgh Worcester Denver

> Export Representative: U. S. Steel Products Co., New York

Pacific Coast Representative: U. S. Steel Products Co.

Portland Seattle San Francisco Los Angeles



building Ankyra Bolts can be used to advantage. They can be applied without fuss and trouble. Studdings and other reinforcements are unnecessary. Ankyra Bolts are absolutely permanent in any wall—unless purposely removed. They are unequalled for neatness. They permit any number of changes in plans regardless of supports for grounds, steam heating, plumbing fixtures, etc. The wood screws used with Ankyra Bolts can be inserted and withdrawn at will, as often as desired.

Specify Ankyra Bolts for mouldings, grounds, furring strips, fixtures for bathrooms, kitchens, pantries—everywhere from basement to roof. The fact that they were used in such buildings as the Hotel Fontanelle, Omaha; Algonquin Hotel, St. Catharines, N. B.; Massachusetts Institute of Technology, Cambridge, Mass.; Amherst College, Amherst, Mass.; University of Texas, Austin, Texas; Quebec Union Station, Quebec; Grand Central Terminal, New York City, and in many other equally prominent structures, is convincing testimony of Ankyra superiority.

Get our interesting booklet, sample bolts and prices. There is no obligation. Write today.



This house is on Alexandria Street, Los Angeles. C. C. and S. J. Chapman Co. painted it with one coat of Bay State Brick and Cement Coating. Look at it. It looks as if it was just built.



This is Reed Hall, Dartmouth College, Hanover, N. H. It is getting its just dues with a good coat of "Bay State." The front is pretty near finished—look at the difference between it and the side.



Protection, Good-Looks and Economy, too

All three are in Bay State Coating—in quantity. Protection: because it makes brick, cement, concrete or stucco absolutely waterproof. Good-looks: because — well, you can satisfy yourself on this point by the pictures. Economy: because just a covering does the trick.

Bay State Brick and Cement Coating comes in white and a variety of tints.

Write us and get some information about this coating. Our booklet, No. 6, is full of facts and photographs that will interest you. Let us know the tint you desire and we'll send a sample along.

> Bay State Cement Crack-Filler is for use around window frames and other places where settling causes cracks. It is easily applied and not detectable.

WADSWORTH, HOWLAND & CO., Inc.

Paint and Varnish Makers

New York Office: Architects' Building

Boston, Mass.

WATSON 20th CENTURY "REWIRABLE"



For Windows

INSECT

For Doors

SCREENS

Short Talks With Architects

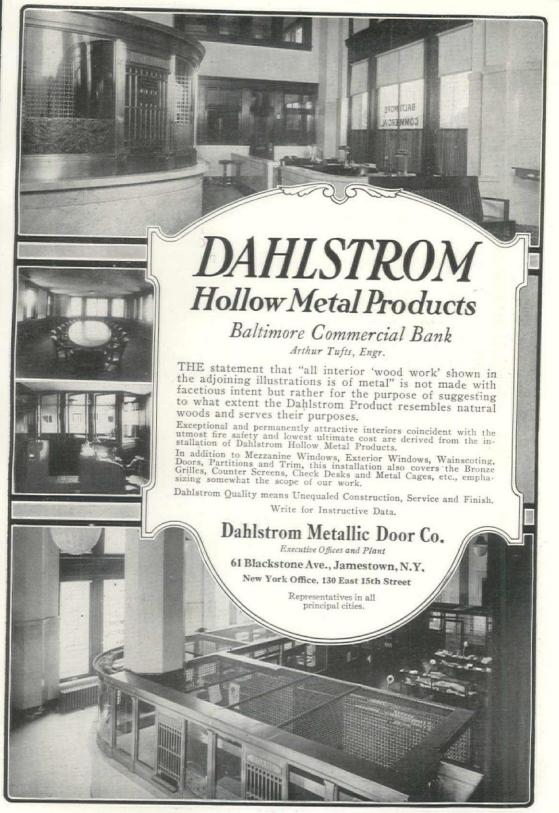
No. 9-FIRST COST

Do not be blinded by first cost. You cannot tell how deep a well is by looking at the top. Neither can you tell by looking at the purchase price, how cheap or dear a screen is going to be. The first cost is important, of course, but results and cost per year are the really vital considerations. Our salesmen will be pleased to call and give you personal attention, and intelligent advice. You will find it a pleasure and a source of satisfaction to entrust your screen contract to us. Write for the Watson literature.

Watson Manufacturing Company

Jamestown, New York





VENUS 10° PENCIL



You satisfy every requirement every time with this famous pencil!

Suppose you say, "I like the softest, smoothest pencil I can find." Take

VENUS 6B-5B-4B

A stenographer needs a good pencil for her purposes. Provide medium soft for all general work.

VENUS 3B-2B-B

A manufacturer who orders VENUS for the use of his sales and bookkeeping departments will be pleased with medium degrees

VENUS HB-F-H-2H

A draftsman for thin, clear lines will choose

VENUS 3H-4H-5H-6H

And a statistician or engineer for graphic charts will prefer the hardest pencil for the thinnest, clearest marking, such as

VENUS 7H-8H-9H

If you're not familiar with the 17 degrees of VENUS Pencils, and the hard and medium copying, you are handicapped in your work. Look for the water-mark finish.



Write us on your business letterhead and we shall be pleased to send free for test this box of VENUS drawing pencils, VENUS copying pencil and VENUS Eraser. Write us to-day.

American Lead Pencil Company

224 Fifth Avenue - - New York

and Clapton, London, Eng.

"ANTI-HYDRO"

A LIQUID INTEGRAL CONCRETE HARDENER
WATERPROOFING DAMPPROOFING

Results are Positive and Permanent

"It is the most impermeable of any of the Mortars."—Tech. Paper No. 3, United States Bureau of Standards.

"Anti-Hydro"—a liquid integral compound which when added to the water for gauging the cement mixture makes the resulting masonry waterproof, dustless and adamant. The most efficient waterproofing and concrete hardener known.

Correspondence solicited on all difficult Waterproofing and Concrete Hardening propositions.

Write for Booklet.

Manufactured by

Anti-Hydro Waterproofing Co.

Consulting Waterproofing Engineers

170 Washington St. Newark, N. J. Singer Building New York City

6 Beacon St., Boston, Mass.

Booth 79, Building Exposition, New York City

FINE INKS and ADHESIVES For those who KNOW



HIGGINS'

DRAWING INKS
ETERNAL WRITING INK
ENGROSSING INK
TAURINE MUCILAGE
PHOTO MOUNTER PASTE
DRAWING BOARD PASTE
LIQUID PASTE
OFFICE PASTE
VEGETABLE GLUE, Etc.

Are the Finest and Best Inks and Adhesives

Emancipate yourself from the use of corrosive and ill-smelling inks and adhesives and adopt the Higgins Inks and Adhesives. They will be a revelation to you, they are so sweet, clean well put up, and withal so efficient.

At Dealers Generally

CHAS. M. HIGGINS & CO., Mfrs. 271 Ninth Street, Brooklyn, N. Y. Branches: Chicago, London 8 Attention is directed to the

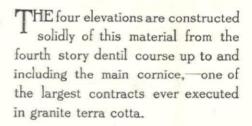
Federal Granite Terra Cotta

in the new

Public Service Building, Baltimore

Parker, Thomas & Rice, Architects

J. Henry Miller, Inc., Builders



The terra cotta reproduces exactly the color, texture and general appearance of the natural Pink Milford Granite used in the lower stories.

Special attention is called to the size and straightness of the individual pieces of terra cotta.

Federal Granite Terra Gotta, in which this company specializes, is the result of many years' experiments. It has all the advantages of natural granite and greater durability and fire resisting qualities in addition.

Manufactured by

Federal Terra Cotta Co.

Trinity Bldg., New York Kresge Bldg., Detroit

BIXON'S

"ELDORADO"-

the master drawing

pencil

0

Long Wearing

With Dixon's Eldorado there's no need to worry about frequent sharpening—the leads wear long and hold a particularly fine point. They are strong and smooth—absolutely no grit; and no smudge in the harder leads. Made in America, in seventeen degrees.

ELDORADO

"the master drawing pencil"

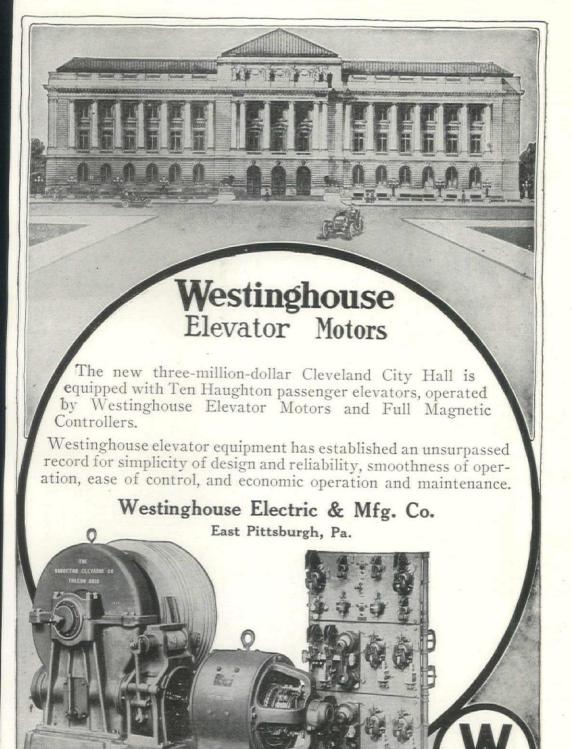
Write us on your letter head for free samples of your favorite degrees, compare them with any drawing pencils of the same degree you have ever used, and see which pencils last the longest, giving the best and most satisfactory service at the same time.

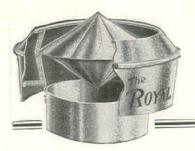
You need only to test Dixon's Eldorado to convince yourself that it is "the master drawing pencil."

Joseph Dixon Crucible Co. Dept. 225-J, Jersey City, N. J.

DIXON'S BEST WHITE Nº 352 Writes white on blumprints







Made in sizes and types adequate to all requirements

Royal Ventilators

Twenty-five years of practical experience is built right into every Royal Ventilator. Their universal use during the past quarter century is the best evidence upon which to base your specifications. From a scientific viewpoint they embody every requisite of perfect ventilation. There's a size and type for all requirements.

Royal Ventilator Company 407 Locust Street - Philadelphia, Pa.



Note These Exclusive Features

B separable sleeve. In case of any trouble, Regulator (A) can be removed, sleeve (B) remain in tank—unnecesary to draw water from tank.

C Screwed over dial, unauthorized people not tempted to tamper with and change adjustment.

Every good quality sought in a Hot Water Regulator is found in this incomparable H&M TYCOS. Let us send you full information.

Regulator Especially Adapted to Hot Water Tanks



The Ham Division.

Taylor Instrument Companies

Rochester, N.Y.

ROOFING TIN "MERCHANT'S OLD METHOD" has been the accepted standard quality roofing.

has been the accepted standard quality roofing plate for the last quarter of a century. When properly applied, it makes a roof that is durable, storm-proof and

FIRE RESISTING

Open hearth copper bearing base—Palm oil process.

Send for Booklet and Prices to Dept. "C-37." Evans "Almet!" Fire Doors Fire Retarding "Star" Ventilators

MERCHANT & EVANS CO.

Philadelphia

New York Baltimore Atlanta Cleveland



Wheeling Chicago St. Louis Kansas City SIMPLEX
WIRES AND CABLES

RUBBER CAMBRIC PAPER

SIMPLEX WIRE & CABLE @

MANUFACTURERS

201 DEVONSHIRE ST. BOSTON CHICAGO SAN FRANCISCO

1636



The home is not complete without these modern building necessities. Designed to protect the good looks of the home and grounds from the careless coal manto provide for the most sanitary method of garbage disposal and for the safest and cleanest delivery of milk, etc.

Garbage Receiver - Package Receiver

These Majestic Specialties not only make every home complete, but they save work and steps for every housewife, making up for their small cost in a very short time. The Coal Chute keeps the house, lawns and shrubs clean because every piece of coal falls into the bin without damaging the house. Absolutely burglar-proof. The Carbage Receiver is sanitary, water-tight and fly-proof. Emits no odors and keeps the contents safe from dogs and vermin.

The Package Receiver, placed in the kitchen wall, insures milk bottles and packages against theft and keeps them clean.

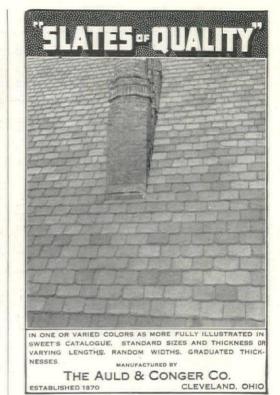
insures milk bott keeps them clean.

Write for Catalog Today

describes these and many other Majestic Specialties.

THE MAJESTIC CO. 701 Erie Street

Huntington, Ind.









Positive Control of Heat—True Economy

You do not need all your radiation in any room more than half the time.

You can control the supply of steam or vapor by one valve at the top of the radiator and you can dispense with other valves, traps and air valves.

By this method you save not only 20% to 30% fuel but also 15% to 20% in pipes, fittings and labor cost.

No Noise-No Leaky Valves-No Complicated Devices



ADSCO ATMOSPHERIC SYSTEM HEATING

With the Valve and the Regulator operating on ounces instead of pounds of pressure you save 20% to 30% Fuel Cost.

Write for Bulletin 133-A, covering requirements of Residence, School, Office and Public Buildings.

If you are interested in the possibilities of buying steam supply as you would gas or electricity, write for Bulletin "Central Station Heating."

Names of architect and steamfitter appreciated.



Regulator

AMERICAN DISTRICT STEAM COMPANY

General Offices and Works, No. Tonawanda, N. Y.
Branches: New York Chicago Seattle



Swinging hoisting head (on ball-bearings) to deposit can on sidewalk. Can pushes gate open.

Provide for Ash Removal The Safe, Speedy Way

With the Model A Hoist, illustrated, one man, unaided, can perform the entire operation of ash removal. He can easily, noiselessly and **safely** raise 500 lbs. at the rate of 30 ft. per minute.

Specify Gillis & Geoghegan Telescopic Hoist

The G & G Hoist is operated from the sidewalk—insuring fullest protection for both public and operator against injury from open hatch. Every hoist has a patent silencer and is subjected to working test before shipment.

GILLIS & GEOGHEGAN

550 West Broadway,

New York City

Telescopic Houst
with Automatic Gear Shifting Brake
Device and Silencer

to the tot



Complete Your Plans

The plans for any building are not complete unless you have provided for scientific refrigeration. It is just as important as the heating and plumbing systems and means much to the comfort and satisfaction of the owner and occupants. Your buildings will be equipped with the most efficient refrigerating system if you specify

SANITARY REFRIGERATORS

There is a McCray-either in stock sizes or made to order for every type of building from the finest hotel or public building to the smallest bungalow. When you put them in your plans, arrange for outside icing door and specify the finish that will match the interior trim.

They may be arranged for either ice or mechanical refrigeration. The linings of white opal glass, enamel or odorless wood are the cleanest and most sanitary known. Food is kept fresh, cool and free from spoiling by the McCray patented system of refrigeration. All odors and impurities are carried away through the water—sealed drain and trap.

McCray refrigerators are recognized as the standard for refrigerator efficiency. Free Plan Service

We will be glad to furnish you with suggestions, blueprints and specifications of any type of refrigerator for any style or size building. We maintain trained architectural draftsmen and give you this service without cost.

Get these catalogs and complete your files

No. 92 for Residences No. 51 for Hotels, Clubs, Institutions No. 70 for Grocers

THE THE THE THE THE THE THE THE TAX AND THE THE

XXX

1

XXX XXX

H

III IXX XXX

No. 62 for Meat Markets and General Storage No. 74 for Florists

McCRAY REFRIGERATOR

AGENCIES IN ALL PRINCIPAL CITIES

762 Lake Street, Kendallville, Indiana

"Perfect Products for Particular People"

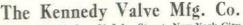
Radiator Valves

NHERENT in Kennedy Valves are those qualities of stock, features of design and procedures of manufacture, which insure the most enduring and economical service to the user.

Raw materials, no less than the finished product, are subject to the most rigid laboratory tests, enabling us to control the quality of our output from the very source.

We are cognizant of the great responsibility which devolves upon the recommendations of the Architect. Our sponsorship therefore goes with every Kennedy valve specified.

This line comprises all types and is most consistently priced.



Elmira, New York 81 John Street, New York City



Write for Catalog and Prices

The Shingles and Timbering

of this beautiful Old-English residence are colored and

Cabot's Creosote Stains

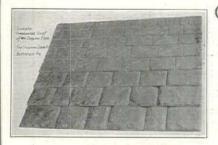
The shingles are warmer than English tiles, and the coloring is much softer and richer, owing to the texture of the wood and the deep velvety tints of the stains. The stained timbers, in old smoky browns and dark grays that bring out the grain, harmonize perfectly and weather out beautifully. Cabot's Stains are artistic, inexpensive, lasting, and the Creosote preserves the wood.

You can get Cabol's Stains all over the country. Send for stained wood samples and name of nearest agent

SAMUEL CABOT, Inc., Mfg. Chemists, Boston, Mass. 1133 Broadway, N. Y. 24 W. Kinzle St., Chicago Waterproof Cement and Brick Stains, "Quilt" Conservo Wood Preservative Dampproofing



Stained with Cabot's Shingle Stains Upjohn & Conable, Architects, N. Y.



SECTION GRADUATED ROOF OF WM. CHAPMAN SLATE

Graduated Lengths and Thicknesses Random Widths—Rough Texture Clear Uniform Blue Black Color

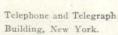
> Such a Roof of William Chapman Slate Conforms to Dignity and Good Taste

> > We Specialize in this Grade of Stock

CHAPMAN SLATE COMPANY

BETHLEHEM, PENNA.

Miners and Shippers of High Grade Roofing Slate in any special and all stock sizes.



Architect: William Welles Bosworth.



Otis Equipment:

Twenty-one Gearless Traction Passenger Elevators.

Two Geared Traction Passenger Elevators. Three Freight Elevators.

Making the Most of a Building

means, among other things, installing an equipment of

OTIS ELEVATORS

And this is just as true of the small one or two-story structure as of the great edifice like the Telephone and Telegraph Building with its 26 Otis Elevators.

OTIS ELEVATOR COMPANY

Eleventh Ave. and Twenty-sixth St., New York
Offices in All Principal Cities of the World

Keystone Copper Steel Roofing

Highest quality roofing terne plates manufactured anywhere.

Tin

Base of Copper-Steel, pliable, rust-resistant, with uniform coating.



KEYSTONE Copper Steel terne plates insure roofs of lasting service and satisfaction, with the best of protection from fire and weather. Look for the stamp "Keystone Copper Steel" in addition to brand and weight of coating, as indicated by MF brand shown herewith.



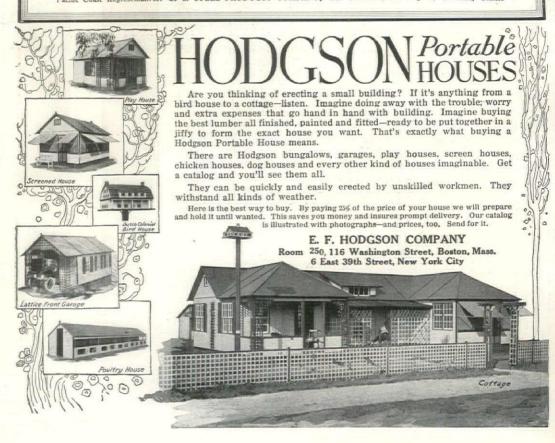
APOLLO-KEYSTONE Copper Steel Galvanized Sheets are unequaled for exposed sheet metal work, Send for our latest booklets on Keystone Copper Steel products.

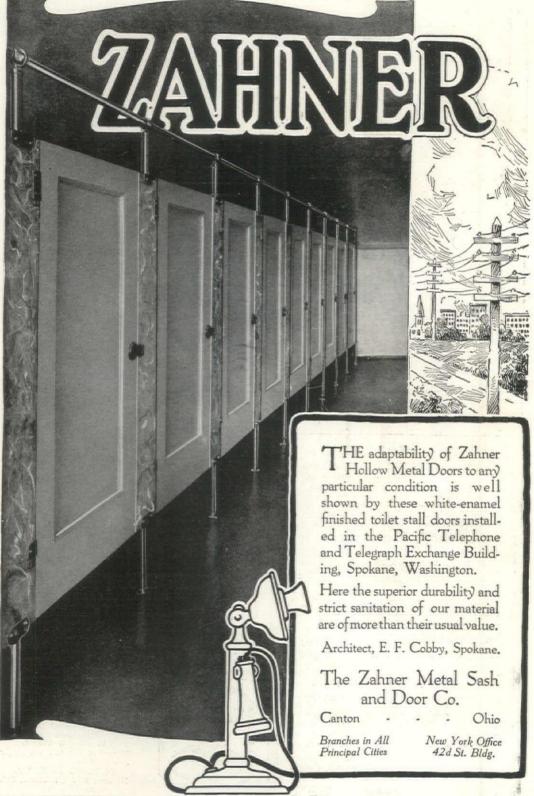
American Sheet and Tin Plate Company General Offices: Frick Building, Pittsburgh, Pa.

Chicago Cincinnati Denver Detroit New Orleans New York Philadelphia Pittsburgh St. Louis

Export Representatives: U. S. STEEL PRODUCTS COMPANY, New York City

Pacific Coast Representatives: U. S. STEEL PRODUCTS COMPANY, San Francisco, Los Angeles, Portland, Seattle



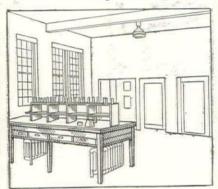






HOSPITAL & LABORATORY ENAMEL

Makes
Light Laboratories
and Cheery Hospitals



Use the wonderful special-service white enamel for laboratory walls and ceilings and they will resist the action of all chemical fumes. Won't break down, peel or crack. Won't change color.

For hospital wards and for dormitories there is no surface that is so bright and sanitary.

"R. I. W." Hospital and Laboratory Enamel withstands steam, heat and moisture and may be washed down with either cold or hot water. Lasts longer than anything else used for the same purpose.

Write for special booklet, Dept. K.

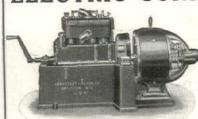
TOCH BROTHERS

Technical & Scientific Paint Makers Since 1848
320 Fifth Ave., New York

WORKS

New York; London, Eng.; Toronto, Canada

ELECTRIC CURRENT



for Churches, Schools, Estates, Asylums, Theatres, Garages.

Simple - Compact - Economical
DIRECT CONNECTED GENERATING SETS
LANGSTADT - MEYER CO.

Write for Bulletin R10 AF

APPLETON, WIS., U.S.A.



ALOWAY POTTERY is everlasting Terra Cotta

Made in a variety of forms for Garden and Decorative use. Catalogue will be sent upon request.

Galloway Terra Cotta Co., Philadelphia, Pa.

The UNIVERSITY OF PENNSYLVANIA

offers courses in ARCHITECTURE as follows:

1. A four-year course, leading to the degree of B.S. in Arch. An option in architectural engineering may be elected.

2. Graduate courses of one year, permitting specialization in design, construction, or history; leading to the degree of M.S. in Arch.

3. A special two-year course for qualified draftsmen with options in design or construction; leading to a professional certificate.

4. Summer School instruction in architectural subjects.

For circular giving complete information regarding the courses, requirements of admission, advanced standing, summer school, fellowships and scholarships, etc., address DEAN OF THE TOWNE SCIENTIFIC SCHOOL, University of Pennsylvania, Philadelphia, Pa.

POMPEIAN STONE FURNITURE



FOR FORMAL GARDEN AND INTERIOR USE Of ur collection of 1500 or more models of fountains, sundials, vases, benches, statuary, fireplaces, balustrading, etc., is the most extensive of its kind in this country. We cooperate with architects in execution of original designs. Estimates turnished on marbles. Write for catalogue F.

The Erkins Studios 224 Lexington A



Beautify Furniture PROTECT FLOORS and Floor Coverings from injury by using

by using
Glass Onward Sliding
Furniture Shoe
In place of Castors.
If your dealer will not supply
you, write us.

ONWARD MFG. CO. Menasha, Wis. Kitchener, Ont.

Opened in a Jiffy



The hotel guest; the busy man in his office; the patrons of a restaurant; or a theatre audience have no patience to wait while someone "monkeys" with the radiator drip valve.

Houghton Therm Valve

An Automatic Drip Valve for Steam Heating Systems

The Houghton Therm Valve not only requires the least "monkeying," but the only "monkeying" possible is to remove the cover, lift out the entire interior and replace it with a new interior.

The entire operation requires less than thirty seconds.

Before you specify another heating system, be sure to read Bulletin "A." We will gladly mail a copy upon request.

SINÇE 1865

E. F. HOUGHTON & COMPANY

Publishers of THE HOUGHTON LINE

Third and Somerset Streets

PHILADELPHIA

OFFICES IN PRINCIPAL CITIES

HV-16



ECCO Wire, because I know it is a good investment. Past experience has proven to me that ECCO is a quality wire—that it is dependable—that it lasts for years.

"Quality wire pays from the start—and pays long after the other kind of wire has ceased service."

For immediate identification and insurance of quality wire, "ECCO" is stamped on the braid every three feet.

Copy of tests on each coil furnished upon request.

ECCO is built up from Underwriter's code to meet architects' standards of quality.

ECCO Dependable Insulated

THE ELECTRIC CABLE COMPANY
Makers of ECCO Wire for every purpose where rubber covered wire is used.
10 E. 43d Street - New York

SIX-IN-ONE

500% Better Service

FUSE PLUG

Your clients will greatly appreciate the convenience of this fuse plug

As easy as turning on an electric light

That is all you have to do to restore lighting service when a fuse blows out. No plug to change. No fuse to insert. No waiting for an electrician. You need never be without lights—constant, uninterrupted service.

Amperages 3 to 30

Maximum Voltage 125

Atlas Selling Agency

450 Fourth Avenue
New York City

700

Architects who specialize on industrial work have been quick to recognize the real merit of

STEELITE

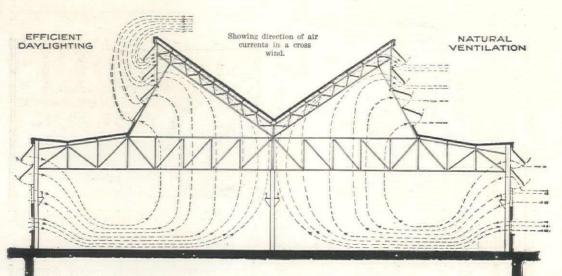
Freight Elevator Gates

Made of Pressed Steel.

Their safety, flexibility, economy and ease of operation appeals to those seeking modern factory and warehouse equipment. These gates have passed the careful scrutiny of leading architects, engineers and factory superintendents and are used in many of the largest industrial plants.

Write for booklet or ask any elevator contractor for information.

The Steelite Company
318 Marion Building, Cleveland, O.



A ROOF that Lights and Ventilates

Foundries, forge shops, steel mills and other large buildings, where heat or chemical fumes are produced, are impossible to ventilate properly with ordinary roofs.

They are both ventilated and lighted abundantly by the

THE ROOF THAT VENTILATES

Every portion of the roof leads directly to the wide outlets, and hot gases are dis-charged without eddies or down drafts. Protected by Pond Continuous Sash, the outlets are weather-proof even when wide open.

Lighting is likewise perfect. No parts of the floor are dark, and even the flask interiors are reached by the overhead light. The outlets, by their vertical and sloping positions and rough glass, admit the maximum diffused light with little direct sunlight. Even the roof wings add daylight when painted white.

The result is to increase largely the comfort and efficiency of employees, to eliminate heat prostrations, and to minimize absences due to colds.

We design each Pond Truss to fit the particular conditions involved. We do not build it, but we license its use for build-ings in which Lupton Products are exclu-

DAVID LUPTON'S SONS COMPANY

Witte and Westmoreland Streets - - Philadelphia, Pa.



LUPTON PRODUCTS Lupton Steel Sash
Pivoted Factory Type
Counterbalanced Type
for factories
Counterweighted Type
for offices
Power House Type Power House Type
Pond Continuous Sash
for Pond Truss, sawtooths, monitors and side walls
Pond Operating Device
for long lines of sash
Lupton Rolled Steel
Skylight
Lupton Steel Partitions and Doors

Our new Catalogue, No. 9, describes the Pond Truss and Lupton Products fully.

> Moline Malleable Iron
> Co., St. Charles,
> Ill. Frank D.
> Chase, Architect.



BRANCH OFFICES: Chicago, 160 North Fifth Ave.; San Francisco, 164 Hansford Bldg.; Los Angeles, 224 Central Bldg.; Mineapolls, 3416 Second Ave., So.; Detroit, 922 David Whitney Bldg. Canadian Representatives—J. E. Beauchamp & Co., Montreal, Can.

Avenue

Imposing Effect at Low Cost

These walls have the appearance of being laid in Genuine French Caen Stone. They are as permanent as the building itself and are easily cleaned.

Excelsior Caen Stone Cement

was used to produce this effect, and the cost was not much more than that of high grade

The cement is a dry powder, which is simply wet up with water, applied by a good plasterer and then pointed off.

Write for illustrated booklet. Also see Sweet's.

The Cleveland Builders Supply Co. Cleveland, Ohio



that many prominent architects consistently specify Upson Board? They maintain it is the wall board chey can depend upon to uphold their reputation and to satisfy every artistic and physical requirement for interior linings. Upson Board is as different from ordinary wall boards as it is from cracking, chiping, falling plaster. It is really artificial lumber—hard, stiff, strong; and looks, feels, and works like lumber. The only wall board SCIENTIFICALLY PROCESSED: thoroughly kiln-curef; effectively waterproofed; surface-filled, to provide a perfect painting surface. Used in handsomest interiors. Adapted to paneling or unbroken wall spaces. Investigation will repay you. Send for sample and see how different this better board is.

THE UPSON CO., Fiber Board Authorities

82 Upson Point, Lockport, N. Y. many prominent arch specify Upson Board?

82 Upson Point, Lockport, N. Y.

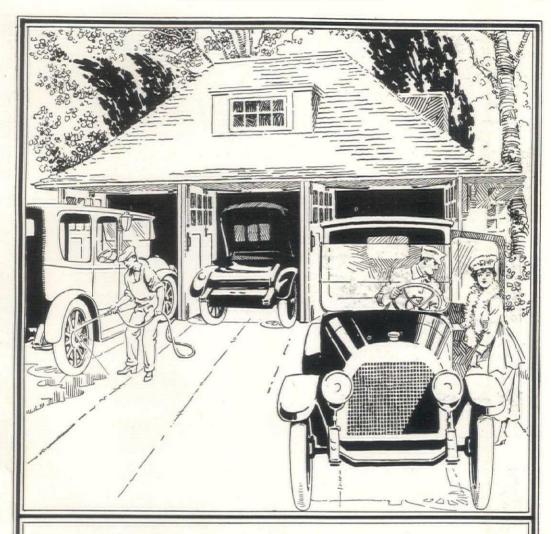
LOOK FOR THE FAMOUS BLUE CENTER

HE architect who investigates recommends a water supply system that is economical in first cost and in operation, dependable in its working, and thoroughly well built. all accomplished in the

Standard Pumping Units
They are the result of fifteen years' experience, longer study, and have a deserved reputation for reliability and economy. Electrically or gas driven, air pressure, assembled and tested before leaving the factory, these units are made in sizes to fit country homes, institutions, florists' and market gardeners' plants, etc. Send for catalog.

Our engineers gladly co-operate with architects.

THE STANDARD PUMP & ENGINE CO. Akron, 780 Carroll Street



WHEN garages are to accommodate more than one car, it will add to their convenience if you plan the doorways so that all can be open at the same time. This is best accomplished by the use of Stanley Garage Hardware.

DOORS hung on Stanley Garage Hinges take no inside space to operate, swing easily, without sagging, and close weather-tight. Stanley Garage Door Holders 1774 keep them from slamming against each other or the incoming and outgoing cars. Stanley Garage Hardware will give long and satisfactory service and improve the appearance of every garage you build. You can get it at most builders' hardware stores.

The Stanley Garage Hardware catalog D-3 should be in your file. If it is not, write for it today.

THE STANLEY WORKS, New Britain, Conn.

New York, 100 Lafayette Street

Chicago, 73 East Lake Street



Get Rid of Surplus Water Anywhere and Everywhere

Automatic Cellar Drainer



WHAT IT DOES "AUTOMATICALLY

KEEPS THE PLACE where installed free from water without attention from anyone. ELEVATES WATER from 3 to 18 feet, according to pressure.

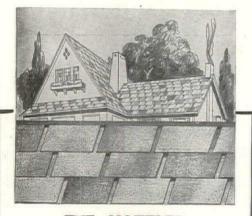
REMOVES WATER AT rates varying from 115 to 6,500 gallons per hour, according to size and conditions

VALVES AND WASHERS of entire brass; no leather used.

All Working Parts Above Water Operated by Water Pressure MANUFACTURED AND GUARANTEED BY

PENBERTHY INJECTOR COMPANY, Detroit, Mich.

Canadian Factory Windsor, Ont.



THE MOTTLED HUDSON ASPHALT SHINGLES

are now offered to architects, surfaced with red and green crushed slate in varying proportions, producing the variety of surface texture so much sought for.



Send for samples of these artistic, durable and easily applied shingles.

Asphalt Ready Roofing Co.
9 Church Street, New York City

BEAUTIFUL

Are the source of unlimited satisfaction and pride. Wherever OAK FLOORING is used, it always attracts a better class of tenants and assures better renting and selling values.

OAK FLOORS mean satisfaction; the first cost is the last, as repairs are eliminated. With a little care, OAK FLOORS will last a lifetime.

3/8" OAK FLOORING offers a very beauti-OAR FLOORING oners a very low cost. It is the ideal floor for laying over old floors in old buildings, as well as in new buildings over cheap sub-floors. When laid it has all the appearance of 13/16" stock.

OAK FLOORING is beautiful, distinctive and substantial and rightly deserves the name

"AMERICA'S BEST FLOORING"

When you specify OAK FLOORING for any building, you can rest assured that you have done a distinct service for your client that will always reflect to your own credit.

See our Page 758-1916 Sweet's Catalogue. Write for booklet.

Oak Flooring Service Bureau 1355 Conway Building, CHICAGO



FOR MODERN RESIDENCES and APARTMENTS

The Electric Food and Plate Warmer

This device is indispensable to the modern idea as expressed in the

kitchen equipment of apartments, residences, private schools, sanitariums, hospitals and public institutions.

It will absolutely keep food steaming hot until ready to serve. Cannot injure the finest china because the shelves are independent of the heating units. Wire-less heating units of practically unlimited life are used exclusively.

Write for list of installations

Built to order at 237 E. 43d St., New York, by

The Prometheus Electric Co.

Manufacturer's Agents Kindly Write.

The

Western Electric Company

supplies everything electrical and everything needed for the distribution and use of electricity, all of the best quality.

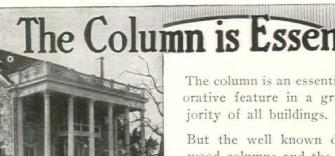
The Company has

32 Distributing Houses

for the convenience of its customers. The Company issues literature on its products which will interest architects.

Send your name and address to the house nearest you. See following list.





The column is an essential decorative feature in a great majority of all buildings.

But the well known defects of wood columns and the prohibitive price of stone have steadily decreased their use.

"The Ones That Last A Lifetime"

have solved this problem and preserved the have solved this problem and preserved the column to architecture by overcoming splitting, checking, rotting, warping and the other defects which sooner or later occur in every wood column.

The shafts are formed from heavy galvanized open hearth steel—an absolute guarantee that they will never develop any of these defects. Every bearing member in the column is of metal

and they will last as long as the building

and they will last as long as the build itself.

There are ten different classical designs, ranging to 32 feet in height and 36 inches in diameter. They are architecturally correct, in exact accordance with the ancient orders of architecture and in keeping with the most conservative ideas of architecture.

The Union Metal Mfg. Co.

Canton, Ohio

Ask for Booklet No. 67.

FRIEZE IN NEW GUARDIAN BANK, CLEVELAND, O.

Walker & Weeks, Architects



THE FISCHER & JIROUCH CO., 4821 Superior Avenue

Decorative Sculptors

CLEVELAND, OHIO

The home of round valleys and rough textures"



THE JOHN D. EMACK

ARTISTIC ROOFING SLATE

In many soft neutral shades

PHILADELPHIA - NEW YORK 25 S. 12th Street 53 Vanderbilt Ave



The Winslow Window

(AUSTRAL BALANCE)

The STANDARD Window for Office and Public Buildings

Offers advantages from every standpoint over the ordinary double hung sash.

The efficient office is the office of today. Business men are bending every effort to establish efficiency in their office routine. Efficient equipment is the first step in this direction.

In this connection the Winslow Window is a big aid. It helps men to do good work and to keep in good health.

Winslow equipment makes the office 15 to 25% brighter. Men can see to do their work without eye strain or use of artificial light. They can breathe fresh air all day long without catching cold or having papers blown by direct drafts. The Winslow Window conserves time—it never sticks or binds. Its simplified construction gives neat appearance to the office and to the building.

You will find many useful facts in our latest catalog. Write for copy.

WINSLOW BROS. COMPANY

Ornamental Iron and Bronze

Your contracts for designs, placed with us, will be handled satisfactorily and quickly. Over five acres of modern equipped floor space, over thirty years of experience, enables us to offer unusually helpful SERVICE. Our book of plates will be found distinctive. It is sent on request to registered architects.

Main Office and Works
4600-4700 West Harrison Street
Chicago

Mailing Address, P. O. Box No. 803

BRANCH OFFICES

Central Building Los Angeles

8 W. 40th St. Building New York

Ferguson Building Pittsburgh

Points of Superiority

Admits maximum of light. Ventilates without direct drafts. Shades arranged so that awnings are unnecessary. Permanently weathertight. Self contained—neat appearance. Fewer parts—ease of operation. Eliminates ventilators, weather strips, cords, pulleys or counterweights. Fitted with solid bronze hardware. Solid rolled steel frame with welded joints.



Have You Given Him Your BEST?



Your ability, training and experience all go to your customer. Still, are you giving him all you should—unqualifiedly the **best** there is? The experience of others—big, successful architects—cannot fail but be of help. **They** use

Dayton PATENTED Inserts

in concrete buildings, so that fixtures, furnishings, sprinkler systems can be installed later on without expensive drilling into the set concrete. Dayton Inserts withstand extraordinary strains, vibrations and shocks.

¶ Samples to architects upon request.

The Dayton Malleable Iron Company DAYTON, OHIO





National State Bank Newark, N. J.

Cass Gilbert Archt.

Start Your Building Right

The four free standing columns and the base course running along the two street fronts of this corner building are made from

ROCKPORT GRANITE

Highly polished and sea green in color, these Rockport Granite columns add greatly to the architectural effect of this magnificent building.

Rockport Granite has a fine texture which makes possible the execution of elaborate detail work. It is ideal for all architectural purposes, whether bank or office, monument or public building.

Rockport Granite is obtained in a variety of shades—sea green, pink and gray. Prompt shipments are assured because of our extensive plant and quarries close to the sea.

See SWEET'S CATALOGUE for color charts, tests of strength by United States Government, and references of use on important buildings, or write our nearest office for any information you desire.

Rockport Granite Co., Rockport, Mass.

C. Harry Rogers, Treas. and Gen'l Mgr.

New York, 21 Park Row BRANCHES: Chicago Chamber of Commerce Bldg.

Represented by A. G. MacInnis Boston, 31 State St. Represented by J. D. Duffy
Winnipeg, Can., Represented by N. J. Dinnen & Co. 66-24



SCRIBNER'S

STORIES FIRST IN QUALITY

FOR the third consecutive year, Scribner's Magazine ranks first in the percentage of stories of distinction in the selection of "The Best Short Stories of 1916," by Edward J. O'Brien, in the Boston Transcript. Mr. O'Brien read and considered 2,700 stories in seventy periodicals.

Nine Scribner's stories were singled out for their qualities of permanent literary value. Eighteen others "possessed high distinction," and seventeen more were chosen for special mention.

The judgment of this unprejudiced authority proves again that sheer merit is the editorial standard by which fiction is chosen for Scribner's.

Scribner's for March

CHARLES SCRIBNER'S SONS

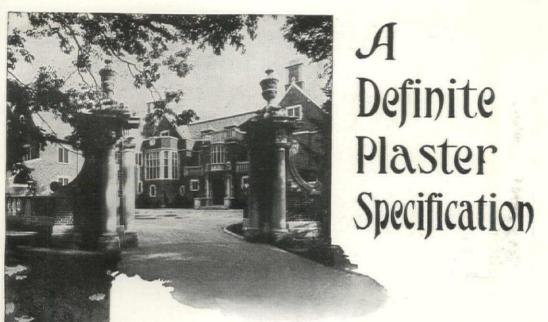
Publishers, Importers, Booksellers
Fifth Avenue at 48th Street, New York City
Established 1846

Averting a Calamity

RAILROAD strike would have an immediate, sweeping effect upon the daily lives of every American. And such a crisis is no more an impossibility now than it was last fall, when both labor leaders and railroad managers were willing to have it come.

You will appreciate the dangers and the need of finishing the patchwork legislation already started when you read "Government Prevention of Railroad Strikes," by Samuel O. Dunn, in the March SCRIBNER'S. As Editor of the Railway Age Gazette he is an authority in his field just as Alexander Dana Noyes, who has an article every month in SCRIBNER'S, is an authority on the Financial World.





Plastering material is an item which offers a wide range of quality, and for that reason demands the expert service of the architect to select and **definitely** specify just what shall be used in any building.

Tiger Hydrated Lime

White Rock Finish

Tiger Hydrated Lime offers certain exclusive advantages which many leading architects have come to recognize and their plaster specifications particularly state "Tiger Hydrated Lime shall be used."

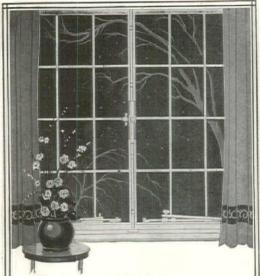
This clause guarantees that the white coat will never "pit" or "blister" and that a smooth, white permanent finish will be secured.

It assures a quiet, sound deadened wall in which all sounds and echoes are muffled by thousands of tiny air cells which are found only in good lime plaster.

Instead of "a good grade of lime," say "Tiger Hydrated Lime"—that makes it definite.

The Kelley Island Lime & Transport Co. Cleveland, O.





CRITTALL

for

Homes Churches Office Buildings Stores Factory Offices Etc., etc.

They are-

Fireproof
Weathertight
Attractive
Convenient

Architects—We have prepared a very valuable book for your use exclusively. A copy will be mailed, free of charge, if request is made on your business stationery.

Crittall Casement Window Company

Manufacturers of
Solid Steel and Bronze Windows
Detroit, Michigan



Bedford Stone Club Auxiliary

Bedford

Indiana

To Architects and General Contractors:

In order that you may receive competitive bids from our members and avoid the necessity of submitting plans and specifications to each concern, we would suggest, that, on any building projects you may have in which stone will be used, if you will forward one set of the drawings and specifications to us, we will make same available for all of our members.

Bedford Stone Club Auxiliary

Mason Safety Tread

Statistics compiled by the Chamber of Commerce of Rochester, N. Y., show that out of 100,000 accidents, those due to falls come second—the total from this cause being 18,367. A large majority of accidents due to falls can be eliminated by the use of MASON SAFETY TREAD.

Is it not worth while to include Mason Safety Treads in your specifications and thus make your clients practically immune from accident claims due to injuries received by falls?

The first cost is small, the saving is large.

Mason products are inspected and approved by the Underwriters' Laboratories, Inc.

Samples filed with The Architect's Samples Corporation, Architects' Building, Park Avenue & 40th Street, New York City.



For full details and samples address,

American Mason Safety Tread Company 100 Perry St., Lowell, Mass.

Branch Offices

Boston New York Philadelphia Cleveland Chicago SEE SWEET'S CATALOGUE "Not the name of a thing, but the mark of a service"

MAZDA



MAZDA Service, a systematic research for making lamps more economical

THE MEANING OF MAZDA—MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service.

MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady. The mark MAZDA can appear only on lamps which meet the standards of MAZDA Service. It is thus an assurance of quality. This trademark is the property of the General Electric Company.



RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY



4635

"A building can be rented more readily—*if*

the necessary requisites for telephone wiring are understood by the owner and the architect when the plans are being prepared, and are provided for in the plans BEFORE excavation is started. If the building is properly wired for telephone service, it can be rented much more quickly and more permanently," said a building expert recently.

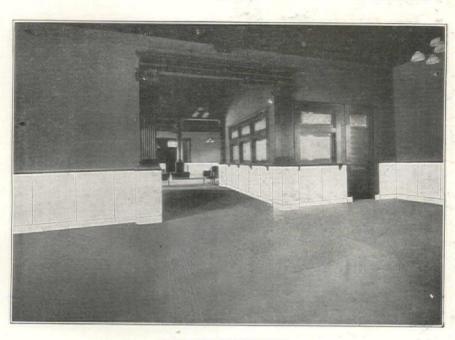
The engineers of this company will be glad at any time to give architects, owners or builders the benefit of their experience in planning for telephone service in new or remodelled buildings.

Why not make use of this engineering service in connection with the original plans for buildings you are interested in?



NEW YORK TELEPHONE COMPANY

VITROLITE



VITROLITE WAINSCOTING, RAILROAD STATION. LOUISIANA SHREVEPORT & NORTHERN R. R.



Wainscoting Means Sanitation— Permanence—Utility—Economy

VITROLITE embodies the qualities of an ideal wainscot. It is white—smooth and hard—Easy to Clean—Non-Absorbent and acid proof. Fastened with plastic cement that permits adjustments due to expansion, contraction and settling.

May we send you descriptive literature

THE VITROLITE COMPANY

Chamber of Commerce Building

CHICAGO



AND CAST FOUNDRY IRON

Burlington, N. J. General Offices; SALES OFFICES

Philadelphia—1421 Chest-nut St. New York—71 Broadway

Pittsburgh-Henry W. Oliv-

er Bldg. Chicago—122 So. Michigan Boulevard

St Louis-Security Bldg St. Louis—Security Bldg. Birmingham, Ala.—Ameri-can Trust Bldg. San Francisco—Monadnock Bldg. Buffalo—957 E. Ferry St. Portland, Ore.—Northwest-ern Bank Bldg.



The "H&H" Floor Plug

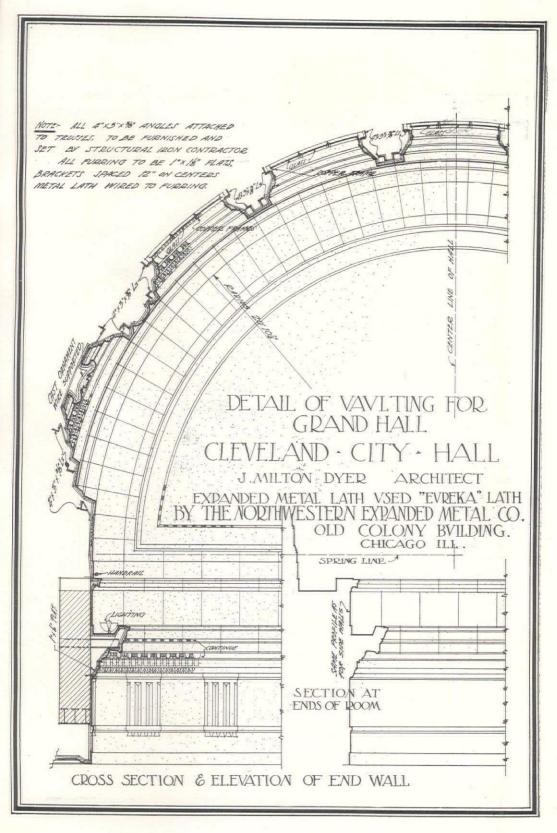
With the increased use of semi-direct lighting fixtures to which a cord cannot easily be attached, there has been an insistent demand for a floor attachment plug. "H & H" Receptacles have sliding shutters that close the opening and keep out the dirt.

Frequently it is necessary to reach a receptacle underneath a rug or carpet. The fabric can be spread sufficiently to allow the two prongs to pass through. Plugs with extra long prongs are made for this use.

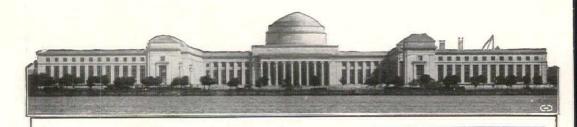
The prongs of "H & H" plugs are insulated all way down to the tips, so there is no danger of short circuiting. As soon as the tips of the prongs leave the receptacle contacts, fibre shutters close be-hind them, cutting off any arc.

The same receptacle is used in the baseboard or wall and it is absolutely safe for children to play about them, for the openings are tightly closed.

The Hart & Hegeman Mfg. Co. Hartford, Conn.



"BEAUTIFUL BIRCH FOR BEAUTIFUL WOODWORK"





The Correct Choice

In the Massachusetts Institute of Technology Buildings (Wm. Welles Bosworth, Architect), "Beautiful **birch**" was very naturally chosen for practically all the trim and doors. This is but one, though a conspicuous example.

Due no doubt to the present happy tendency to decrease the use of imitation materials, this **birch** was stained a rich brown—not, as is too often the case—"mahoganized."

birch is one of the world's fine cabinet woods in its own right. It takes practically all stains beautifully.

May we send you sample panels variously finished?

The NORTHERN HEMLOCK and HARDWOOD MFR'S ASSN.
202 F. R. A. BUILDING OSHKOSH, WISCONSIN



Ve Could Strike a Match-

anywhere inside the basement walls, while outside water stood against them for three weeks," writes Mr. H. T.

Liebert, architect-in referring to the basement of the Trevelen Building, Fond du Lac, Wisconsin.

The walls of this building were made permanently water tight and dampproof with

PASTE AND POWDER

Medusa is not a surface paint or mixture but the original integral waterproofing-a material that becomes an inseparable part of the Portland Cement without affecting its strength, setting or color and making a concrete or stucco absolutely watertight and damp-proof.

No matter what your waterproofing problem is, whether it be a retaining wall; a basement or cellar walls for a home, bank building or factory; a tunnel; floor; or a swimming pool or reservoir, Medusa Waterproofing will make your concrete permanently water and damp-proof.

And remember the time to waterproof is when you build.

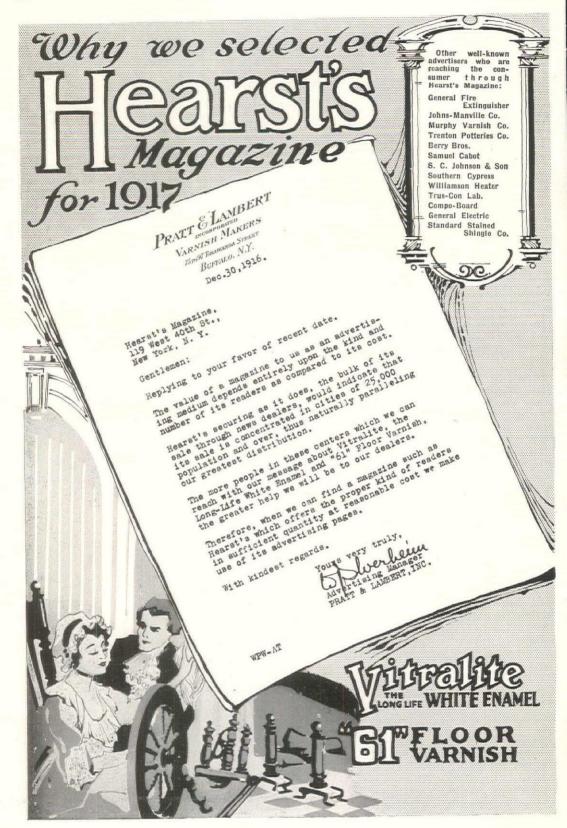
Put your waterproofing problem up to our engineers. Their services are at your disposal. Telling us the kind of structure you are designing will enable us to give you specific data.

Write for literature describing uses of Medusa Waterproofing and Medusa White Cement (plain and waterproofed).

THE SANDUSKY CEMENT

Dept. R

Cleveland, Ohio, U. S. A.





"Standard" Pembroke Built-In Baths For Those Who Know and Care

THE "Pembroke" has been a revelation to hundreds of home builders who demand the ultra-fine in built-in baths, who seek baths of artistic lines and proportions, whose aims in buying include that which is serviceable, proper and beautiful.

"Pembroke" represents more than a built-in bath idea. It represents an institutional policy whose first requirement is that pace be kept with improvements and new demands.

The "Standard" line of Plumbing

Fixtures for Bath, Kitchen and Laundry is of wide range—to meet any possible need. Requests from architects for information regarding "Standard" designs, service, or touching any plumbing problem will be gladly answered.

Standard Sanitary Mfg. Co. Dept. 5, Pittsburgh, Pa.

NEW YORK	"Standard"	
NEW YORK (EXPORT DEPT.). 50 - BROAD BOSTON 186 DEVONSHIRE PHILADELPHIA 1215 WALNUT WASHINGTON. SOUTHERN BLDG. PITTSBURGH 106 SIXTH CHICAGO 900 S. MICHIGAN CHICAGO 14-30 N. PEORIA ST. LOUIS 100 N. FOURTH	NEW YORK	
BOSTON	NEW YORK (EXPORT DEPT.)50 BROAD	ŧ,
PHILADELPHIA	BOSTON186 DEVONSHIRE	
WASHINGTON. SOUTHERN BLDG. PITTSBURGH 106 SIXTH CHICAGO. 900 S. MICHIGAN CHICAGO. 14-30 N. PEORIA ST. LOUIS. 100 N. FOURTH	PHILADELPHIA1215 WALNUT	
PITTSBURGH 106 SIXTH CHICAGO 900 S. MICHIGAN CHICAGO 14-30 N. PEORIA ST. LOUIS 100 N. FOURTH	WASHINGTONSOUTHERN BLDG.	
CHICAGO		
CHICAGO14-30 N. PEORIA ST. LOUIS100 N. FOURTH		
ST. LOUIS 100 N. FOURTH		
	ST LOUIS 100 N. FOURTH	

nowrooms where Star	mand Fixture
CINCINNATI	633 WALNUT
TOLEDO	., 311-321 ERIE
COLUMBUS 24	3-255 S. THIRD
YOUNGSTOWN219	CHAPEL PLACE
WHEELING	
ERIE1	28 W. TWELFTH
LOS ANGELES	
LOUISVILLE	
NASHVILLE	
NEW ORLEANS	

may be seen	
HOUSTON	
DALLAS 1	
SAN ANTONIO	212 LOSOYA
FORT WORTH	.828-830 MONROE
TORONTO, CAN	59 E. RICHMOND
HAMILTON, CAN	20 W. JACKSON
SAN FRANCISCO	149-55 BLUXOME
DETROIT OFFICE	
KANSASCITY OFFICE.F	RESERVEBANK BLDG.

Have You Sent for Your Samples of AMERICAN WALNUT VENEERS and Investigated

Penrod Service to Architects?

For the architect who wants unusual effects in American Walnut interior trim on important jobs, Penrod Service embodies an opportunity to make selections from registered samples.



This panel, matched in our plant, gives an idea of the truly wonderful effects it is possible to secure with American Burl Walnut Veneers such as are made by Penrod.

This service is rendered without cost or requiring attention to "fussy" details.

The samples are submitted for inspection, the selection is made and Penrod Service submits its estimate. When the trim contractor makes his bid, the quotation on the selected veneers is made a part of his estimate. When the contract is let the trim manufacturer will be supplied with perfectly matched veneers, identical in character, all from the same log, sufficient in quantity to assure a harmonious and effective completed job.

We shall be pleased to correspond with architects who are interested in this unique service, which we plan to make increasingly valuable to architects desiring the best possible results in their finished work.

PENROD WALNUT & VENEER COMPANY

"WALNUT SPECIALISTS FOR THIRTY YEARS"

KANSAS CITY, MO.

全世代的主义的 电话的 医多数 建新的的 计可以 化二甲基酚

CONTROL OF THE PROPERTY OF THE

VILLE WHITE ENAMEL

O some architects who value it for its beauty, the thought of specifying Vitralite on refrigerating plants, boiler rooms, kitchens and factory walls, is as distasteful as the idea of seeing a priceless old master in a squalid hut.

Yet so valuable do many consider its sterling durability that its use in these surroundings is constantly increasing. The master on the cottage wall is none the less a master.

"51" FLOOR VARNISH

YOU realize more fully than your client, perhaps, the importance of a perfect floor in the decorative scheme. To preserve fully the beauty of the wood and at the same time to attain the superlative in service, requires more than floor varnish—it requires "61". The results of constant service tests are proving daily that our claims for "61" are substantial ones. We say it is water-proof, heel-proof and mar-proof. Prove it yourself

Booklet and Sample Panels on Request

See Pratt & Lambert specifications, Sweet's Index, also Specification Data (Canada). An extensive variety of wood finishing effects may be seen in New York City at the Pratt & Lambert Architectural Show Room, 7th Floor, Cameron Building, 185 Madison Ave., Cor. 34th St., also at the Chicago and Buffalo offices.

PRATT & LAMBERT-INC.

Varnish Makers 68 Years

108 Tonawanda Street

《宋五天》。 1975年 197

Buffalo, N. Y.

PRATT & LAMBERT VARNISHES

P&L Varnish Products are made for a great variety of purposes. Used by painters, specified by architects, and sold by paint and hardware dealers everywhere.

Write us about your varnishing problems.



CheInternational Studio

1897-1917

announces its
TWENTIETH ANNIVERSARY NUMBER

Read the symposium on

MARCH 1917

Twenty Years of Art in America

Painting: By Elliott Dangerfield

Sculpture: By W. Frank Purdy

Architecture: By Harrie T. Lindeberg

Decoration: By Frank Alvah Parsons

JOHN LANE COMPANY,	A. R.
120 West 32nd Street, New York Gentlemen: For the enclosed {\$5.00} NATIONAL STUDIO for { one year three months}	kindly send THE INTER-
TWENTIETH ANNIVERSARY NUMBE	R to

The second secon

Build With the Material That Will Remain Beautiful

The buildings you create will always remain inseparably linked with your name. Build of the one material that is permanent, so that its beauty may be a credit to you ten, fifteen or twenty years after you have turned it over to the client. That permanent material, whether for covering roof or sidewalls, is

Asbestos Shingles

They are made of Portland Cement, reinforced with Asbestos fibre, as steel rods do a wall. So they can't burn, can't warp, contract or deteriorate in any way, but grow harder and tougher with exposure to the elements. They are made in three designs and three colors: Newport Gray, Indian Red and Blue Black. These colors are natural and never fade. Painting is never necessary. Ambler Asbestos Shingles practically last forever, without any attention whatever. They present the widest possibilities in aesthetic attainment and are the most economical for your clients.

Booklets, pictures, etc., mailed on request. Also samples, if you desire them.

Keasbey & Mattison Company

Dept. B-7

AMBLER, PA.

Manufacturers of Asbestos Shingles, Building Lumber, Corrugated Sheathing, Pipe and Boiler Coverings

Nothing to Burn

HYDRO-PHEUMATIC SYSTEMS SHOWN IN SWEETS CATALOGUES

DEMING COMPANY, SALEM, OHIO.

HAND AND POWER PUMPS FOR ALL USES

GENERAL AGENCIES IN PRINCIPAL CITIES



Trade Mark Reg. U. S. Pat. Off.

SAMSON CORDAGE WORKS,

SAMSON SPOT SASH CORD can be distinguished at a glance by our trade mark, the spots on the cord. Send for samples and full information

BOSTON, MASS.

Double Pantry Sinks Covered With White Metal

NOT PLATED

Made in sizes to meet every requirement.

Ordinary cleansing preparations can be used.

Write for circular with prices.

JOHN TRAGESER

STEAM COPPER WORKS 447-457 W. 26th St., NEW YORK

MUELLER Self Closing Work

Always fills the bill. It wears-it servesit satisfies. In appearance it is neat and tasty. In mechanism it is unsurpassed.

Mueller Self Closing Work

Has stood the hardest kind of service and come out with flying colors. If you are not acquainted with this particular line and want something right up to the minute that will satisfy your most exacting customer, specify Mueller Goods.



12902 (Pat.)

Made of Benedict Nickel, when specified. Nothing in plumbing goods can be handsomer or more serviceable.

145 W. 30th St. New York City H. Mueller Mfg. Co. DECATUR, ILL.

589 Mission St. San Francisco, Cal.



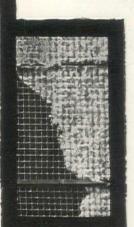
WALL PERMANENCY INSIDE AND OUT

can be assured by using Wright Wire Lath. Walls that crack, peel, split, flake—certainly won't make the owner happy or add to the reputation of the builder and architect. Protection for all concerned then, is to specify and use WRIGHT WIRE LATH.

Wright Wire Lath is a woven fabric of cold-drawn steel wires. Each individual strand is a finished product in itself. It has great strength, durability and rigidity and the strong, even selvage renders it easily handled and tied together.

The illustration below shows how the plaster keys onto the lath. A knobbed key to every mesh. The lath is thus imbedded in the plaster away from all possible dampness.

WRIGHT WIRE LATH



is fire-resisting in the extreme. Ceilings won't sag from the action of fire and water. If fire starts in a room lathed with Wright Wire it stops where it starts. Can be attached to iron or wood furring. Can be worked around all shaped spaces and permits all manner of architectural treatment.

Wright Wire Lath is made in three styles—plain steel, japanned and galvanized.

Our interesting booklet V describes quite at length, Wright Wire Lath. It should be in the hands of every architect, builder, prospective home owner and everybody else interested. It is free—write for it.

WRIGHT WIRE CO. WORCESTER MASS.



If you have a garden, or are going to have a garden —if you own a house, or are going to furnish a house this spring . . . you should consult especially the

SPRING GARDEN GUIDE - March
INTERIOR DECORATION - April

numbers of

House Carden

and the numbers that follow them. House & Garden is a practical help to the home maker; the final authority on the thousand-and-one problems of house building, furnishing, gardening, sanitation and the like, which at one time or another puzzle the owner of every house. Let it also be a practical help to you.

In the next six months you will be spending hundreds—perhaps thousands—of dollars on your home. Experts in home-making—experts who know every trick of the thousand trades that go to equip the gracious and charming home—can at least double the value received from your present house expenditure.

\$1 Invested in House & Garden

A tiny fraction of your loss on a single ill-chosen chair

Will Save You \$100—Perhaps \$1,000

Consider, then, that by the simple act of mailing the coupon below and at your convenience forwarding \$1—a tiny fraction of your money loss on a single ill-chosen chair or discarded

set of hangings—you insure your having expert advice on all your house and garden problems just at the time when you are planning your most important expenditures of the year.

You May Have these Six Numbers for \$1

Spring Garden Guide March Everything that the amateur gardener needs to know planting, planning, forcing. Individual gardens.

Interior Decoration April
The new spring fabrics, wallpapers, furniture. Summery
effects for the all-year house.
Original decorative schemes.

Spring Furnishing May
An exhaustive account of the
work of the best makers of furniture, papers, fabrics and the
showings of the smart shops.

Garden Furnishing June

How to make your garden delightfully livable every hour of the longest summer day. Furnishings, tea equipages, fountains and carven fauns.

Small House Number July Plans for the bungalow, for the holiday house in the country, for all little houses.

Nature Number August
How to get full value from
the big out-doors. The furnishings and possibilities of the
marquee, tennis court, camp.

TO convince you that House &	
Carden is valuable to you per-	
Unatural is variable to jour a spe-	
sonally, we will give you a spec	
cial six months trial subscription	
ior 51 (yearly subscription, 55) be	
ginning with the current issue.	
These numbers will tell you	
know about your house	
and garden problems. / en sol el siteco	
at the very time you	
are spending hun- / w de ni n'el	
dreds of dollars de God Mais	
on your spring	
gardening Salado Allah	
and house Hogoriot at	
ing Lett of the distributed in the best of	
mg. / ard heral body by all is all	
Granding of straight of the st	
A Thin the La	
AS OF GILL HILL	
TO The out of the ser was	
Garden is valuable to you personally, we will give you a special six months' trial subscription for \$1 (yearly subscription, \$3) beginning with the current issue. These numbers will tell you all that you most want to know about your house and garden problems, at the very time you are spending hundreds of dollars on your spring a rd ening and house furnishing.	

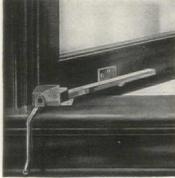


Fig. 1



CASEMENT OPERATOR

Opens and closes outswinging casement windows from within. Screens and curtains may be hung inside without interfering with operation. Locks sash in any position. Has power to overcome binding and rattling. An additional asset to the popular outswinging casement. Simple, strong, practical and ab-solutely guaranteed. Placed on top or within frame work as per illustrations 1 and 2.

Write for Booklet "Household Necessities"

THE OSCAR C. RIXSON CO. 503 So. Jefferson St., Chicago, Ill. N. Y. Office, 508 Architects' Bldg.





Architects, builders and contractors, think what it means to your clients and your future prestige to recommend and specify heating equipment which cuts coal bills one-half to two-thirds—guaranteed. A million-dollar corporation stands behind that guarantee, which is further backed up by the experience of 40,000 UNDERFEED users in every section of the country.

The residence shown above is that of Clay H. Alexander, a prominent attorney in Kansas City, Mo. After using two UNDERFEEDS for the past eight years, Mr. Alexander writes us as follows:

"In my opinion, the UNDERFEED is the only furnace worth installing. It is easier to keep the house at an even temperature than by any other system. The cost of heating my residence of eleven rooms, three stories high, with ground dimensions of 24x36 feet, has been only a trifle more than the ice bill of the Summer, the average for that period being less than \$55.00 a season. The furnace is built on the right principle for obtaining all the heat of the coal and stands without a peer."

IAMSON (INDERFFFD Furnaces

Cut Coal Bills 1/2 to 2/3 Guaranteed

Thousands of similar letters from UNDERFEED users everywhere tell of more heat and less coal the UNDERFEED way. The UNDERFEED is specified and recommended by architects everywhere, because it is built on the correct combustion principle, the principle of an upright burning candle. The coal is always below the fire, so perfect combustion is not hampered by a smothering mass of fuel, as in the old-fashioned Top-Feed. And, because the fire is always on top, all smoke, gand soot is turned into live heat. Cheap or slack grades of coal give as good results as the highest-priced kind. The UNDERFEED is adapted to warm air, hot water, or steam.



Get This Information

Why not write for full information regarding this really wonderful heating equipment and further proof of its ability to fulfill our claims. There is no obligation on your part and as a leading architect or builder in your community you are undoubtedly interested in obtaining the best and most economical heating equipment for your clients. Tear off the coupon below, sign and mail. Get the full details now. Find out how you can cut your clients' coal bills one-half to two-thirds. Send the coupon to-day.

The Williamson Heater Co. 315 Fifth Avenue, Cincinnati, Ohio

The	Williamson	Heater	Co.,	

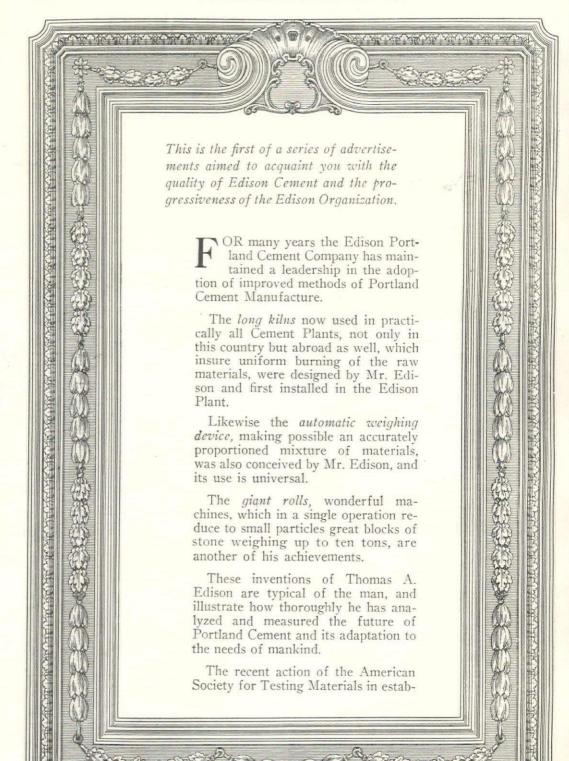
315 Fifth Ave., Cincinnati, O.

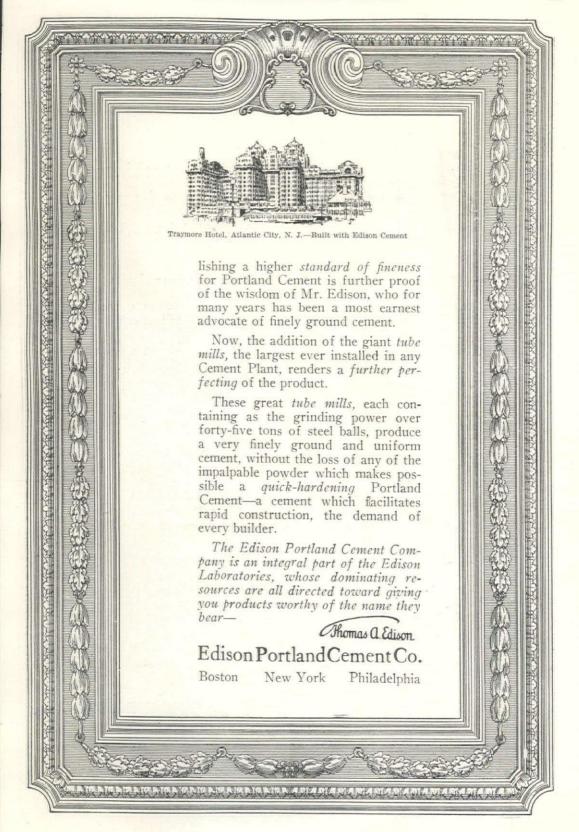
I would like to know how to cut clients' coal bills from one-half to two-thirds by specifying a NEW-FEED UNDERFEED.

Warm	Air	Steam	or	Hot	Water

Name

Address (Mark "X" after system interested in.)





The Country Life Permanent Exposition



This Exposition will interest you and your clients

THE Country Life Permanent Exposition will interest you and your client not merely as an exposition but because it is an effective and dependable means of conveying a graphic idea of the application of modern building materials and appliances to the development and uses of Country Dwellings and Estates.

In carrying out this scheme we have gone so far as to erect a full size, eight room bungalow (shown below) furnished and fully equipped. Every requisite of the truly modern home is seen in fitting relation to the building.

Manufacturers' literature is available at the exhibition booths and attendants are at the disposal of architects seeking further information. A room is also maintained by the Architectural Record Company for conference purposes.

When you visit New York be sure to include this exposition in your itinerary.



The North Carolina Pine Bungalow—a full size eight-room home. One of many interesting Exposition features.

The Country Life Permanent Exposition

Grand Central Terminal New York

THERE IS NO CHARGE FOR ADMISSION



Decorating Specialists at Your Service.

The experts in our Architect's Service Bureau will gladly assist you in working out interior decorative ideas employing SANITAS. SANITAS is made on cloth, finished in durable oil colors. There are dull finished plain tints ready to hang or they can be used as a base for stenciling, blending or fresco work.

Decorative styles resemble expensive wall coverings in design and color and are suitable for any room in hotel or home.

Write for Sample Book

containing 130 styles; we will send it free along with complete data for your files.

The Standard Oil Cloth Co.

Incorporated

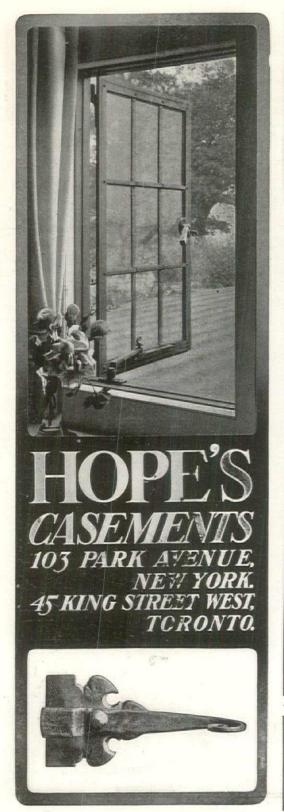
320 Broadway

Department G New York





SANTIAS MODERN WALL COVERING



RELIABLE TANKS

FOR STORAGE OF GASOLINE

Pneumatic Water Supply Tanks, Hot Water Tanks, Smoke Stacks, Chutes, Plate Steel and Sheet Iron Work of every description.

L. O. KOVEN & BROTHER 50 Cliff St., New York

Stately Homes in America

By HARRY W. DESMOND and HERBERT CROLY

Contains 532 pages, with 150 full-page plates of many of the finest homes in America, from Colonial times to the year MCMIII. It illustrates:

Exteriors Stairways Living Rooms Bedrooms Picture Galleries Mantels Music Rooms Ballrooms Halls Reception Rooms Drawing Rooms Dining Rooms Japanese Rooms Libraries Moorish Rooms Gardens Smoking Rooms Conservatories, etc.

TEXT CONTENTS

- I Men Who Build Fine Houses.
- II The Colonial Residence.
- III The Meaning of the Transitional Dwelling.
- IV The Character of the Transitional Dwelling.
- V The Beginnings of the Greater Modern Residence.
- VI The Modern American Residence—Economic and Social Conditions.

VII The Modern American Residence—Its Exterior. VIII The Modern American Residence—Its Interior.

This Book should be in the library of every architect and draughtsman. It is brim-full of valuable information for ALL persons who desire to study the best residential work of leading architects.

Price, \$3.00 (Delivery charge 40 cents)

Special Offer
For only \$5.00 you may obtain this book (prepaid) and a full yearly subscription to new or renewal.

For only \$5.00 you may obtain this book (prepaid) and a full the Architectural Record—either

ARCHITECTURAL RECORD CO.

ARCH	TEC We	TUR	AI 0th	S	t.,	2O N	RD	Y	or.	k.											
	me	"St	ate	dy	H	om	ев	in	1	An	vit	ric h.	a,	• •	aı	nd	e	nt	er	1	ny
Name									٠.				٠.	٠.			٠.	٠.	٠.		
Addres							* *				٠.			٠.							
Occupa	tion																			٠,	٠.



Plaster as related to hospitals must do more than merely serve wall construction purposes.

For some time past it has been recognized that quiet and cleanliness are governed largely by the physical and drying properties of the plaster comprising the scratch and brown coats of the interior walls of buildings.

HYDRATED LIME PLASTER

Serves a Three-Fold Purpose

It provides a structurally perfect wall; deadens sound and promotes cleanliness. Hydrated Lime Plaster dries in such a manner as to form millions of tiny dead air cells. Acoustical authorities agree that this characteristic—the formation of a large volume of fine pores—is directly responsible for a marked reduction of sound transmission and reverberation.

This fact has the support of practical demonstration; the comparison of buildings which have been plastered with Hydrated Lime Plaster with those that have not.

Hydrated Lime Plaster is no less a factor of cleanliness than of quiet. It does not dry too quickly, thus offsetting the buckling of wood lath and preventing the development of unsanitary cracks ordinarily caused thereby. It facilitates the formation of perfect surfaces and base and ceiling coves.

It preserves the sightliness of the wall because it does not decompose paints or tints. Its chief economic advantage is its large sand carrying capacity, together with its retempering feature.

The facts as given in the booklet shown will prove helpful in connection with your future work. Write today for copy.



Hydrated Lime Bureau of the National Lime Manufacturers' Association

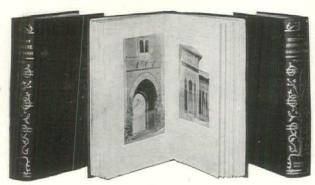
1601 Arrott Building, - Pittsburgh, Pennsylvania

Hundreds of Architects during the past year have had Sturgis and Frothingham's *History of* Architecture sent them for free examination.

Doubtless you will want to see them, too.

Mail the Coupon Today

and receive these splendid reference books on approval without expense to you—subject to return after 5 days' examination.





This valuable history is the logical foundation for every architectural library. It is invaluable for reference to architects, draughtsmen and students of architecture. It is written by accepted authorities. It is recommended by leading architects. It is complete, comprehensive, up-to-date. It will be **the standard** for years to come.

A	HISTORY	OF	AR	CHITE	CTURE
---	---------	----	----	-------	-------

***	By RUSSELL STURGIS and A. L. FROTHINGHAM
10000	Vol. I. The Architecture of Antiquity
A.R. 3-17	Vol. II. Oriental and Romanesque
Architectural	Vol III. Gothic in Europe
Record,	Vol. IV. Gothic in England-Renaissance-Modern
New York. Seed on 5-day approval, all charges prepaid, "A History of Archi-	Specifications: Royal Octavo, 71/4x103/—approximately 400 pages r
f Cloth Binding Leather Binding	Take advantage of this unusual opportunity.
If not satisfactory, I will them in 5 days at your Otherwise I will pay \$2.00 do	Mail the Coupon to-day.
a month until \(\frac{\\$20.00}{\\$30.00} \) is pa	The Architectural Record



Important to Architects

However excellent the plans you have drawn may be, the home or apartment building or hotel which you have designed will not, if inferior plumbing ware goes into it, do you proper credit. This makes it important that you specify

KOHLER WARE

always of one quality-the highest

"It's in the Kohler Enamel" One-piece construction, hygienic designs and the beauty of the enamel are some of the features that contribute to the excellence of KOHLER WARE.

Our trade-mark, permanent in the enamel of every KOHLER product is a guarantee of first quality.

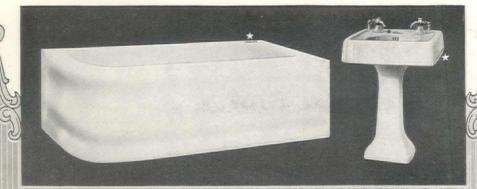
Where built-in tubs are called for specify the "Viceroy." Manufacturing ecomomies enable us to maintain a low price on this remarkable one-piece, all-over enameled tub.

We make KOHLER Bath Tubs, Lavatories and Sinks—always of the highest quality—to suit homes of all types.

KOHLER CO., Founded 1873 Kohler, Wis.

Boston New York Philadelphia Atlanta Pittsburgh Detroit Chicago Indianapolis St. Paul St. Louis Houston San Francisco Los Angeles Seattle London

★ The star indicates the location of the KOHLER permanent trade-mark in faint blue



"Viceroy" V-12 (Patent Applied For)

Columbia Lavatory, K-205A









No. 07050

Diameter 14"; depth 7½".

Brush brass or old brass.

Clear or velvet finish glass.



No. 07030

Diameter 10"; depth 734".

Brush brass or old brass.
Clear or velvet finish glass.



No. 07362

Diameter 12"; depth 5".

Brush brass or old brass.

Clear or velvet finish glass.

Perfect harmony between illumination and furnishings in a moderate-priced unit of the centeroutlet type.

Too often the architect is forced to specify bracket lighting because he is unable to secure—except at a prohibitive price—a center-outlet unit which harmonizes with the other elements of interior decoration.

The solution of every such problem is found in the

Decolite "The Light of Your Personality"

By inserting fabric of appropriate design or color between the two bowls of this unit it instantly becomes an integral part of the architectural plan or decorative scheme.

Not only can you select materials which correspond both in color and motif with the wall coverings and draperies, but, where desirable, you may use the identical fabric employed in the hangings, table throws, etc. Perfect harmony between illumination and furnishings.

Decolite units are constructed on the scientific Holophane principle, producing a soft, evenly-distributed light that eliminates glare.

Write for Architects' Book, illustrating the Decolite in color, and showing harmonious color schemes.

Address Dept. C-20.

Holophane Glass Company, Inc. 340 Madison Avenue New York City







APIDO ITH

Your clients should harden and dustproof their concrete floors. It is a waste to permit the rub of heels and grind of wheels to wear away untreated floors. Besides, the resulting concrete dust is injurious to machinery, merchandise and men.

This liquid chemical makes concrete hard as granite. It completes the hydration of the lime in the cement, greatly increasing its binding grip on the sand in the top dressing.

Insures a perfect Concrete Floor.

Either newly laid or old disintegrating floors should be treated with Lapidolith.

Leading architects, engineers and factory owners everywhere attest to its positive merit.

Specify Lapidolith. Write for book of specifications. Sample flask and Lapidolized block furnished free.

Department 3

L. SONNEBORN SONS, INC.

Manufacturers of Cemcoat, the Washable Wall Coating

> 264 Pearl Street New York

For Concrete Floors

Largest Stucco Building Waterproofed With



Marshall & Fox, Architects

Stern-Smith Co. Plastering Contractors



Edgewater Beach Hotel Chicago

45,000 square feet of stucco on this magnificent building protected against discoloration, hair cracking, and frost action by the use of Ceresit Waterproofing Compound.

The Edgewater Beach Hotel stands on the shore of Lake Michigan and its stuccoed surface is periodically subjected to beating rain, severe storms, sudden changes of temperature in winter and excessive air moisture the year around. Ceresit Waterproofing Compound was used in the stucco to insure the permanence of this cement coated building. The use of Ceresit in cement stucco is economical, there is no addi-

tional labor, and the results are positive and permanent.

There are seven C. W. Co. Products. For the solution of all problems relating to the waterproofing and dampproofing of building construction and the treatment of concrete floors, we maintain an engineering service department which can be consulted at all times without obligation.

CERESIT WATERPROOFING COMPANY

900 Westminster Building, Chicago Philadelphia

Boston

New York

American Enameled Brick & Tile Co.

MANUFACTURERS OF

ENAMELED BRICK "EXC FOR A QUARTER OF A CENTURY

52 Vanderbilt Avenue

New York City

BOBBINK & ATKINS

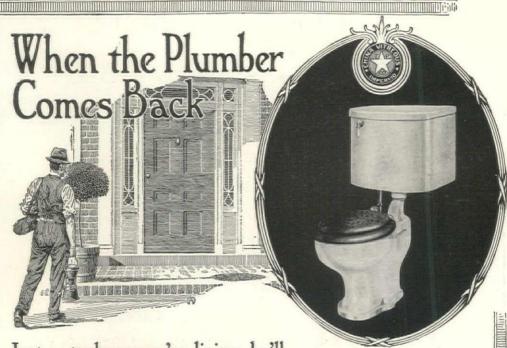
We Plan and Plant Grounds everywhere for Architects with our World's Choicest Nursery and Greenhouse Products. Ask for Catalogue No. 85. Visit our Nurseries.

BOBBINK & ATKINS

Nurserymen and Landscape Gardeners, Rutherford, N. J.







Just as truly as you're living, he'll be back—if you don't make sure you have the right kind of plumbing in the first place.

SHWELCLO
SILENT CLOSET

And every reset water closet, every kitchen sink or laundry tub he replaces, will make you wish you had heeded our word and bought *good* plumbing. For the plumber's time is almost half your expense, and no plumbing fixture we make will cost as much as an inferior one, plus replacement, plus plumber's time.

THE TRENTON POTTERIES COMPANY

"Impervio" China and "Ideal" Porcelain

is virtually a home insurance. So hard is the glaze baked on that any amount of service will not mar its beauty and usefulness. A dampened cloth removes any dirt easily because of this density of the glaze. Pure white, glistening "Impervio" China and "Ideal" Porcelain will make your bathroom, kitchen and laundry showrooms of your home. This is not nec-



Your architect or plumber will tell you that you are buying right if your goods bear the "Star within the Circle" trade-mark. Our interesting and instructive book, "Bathrooms of Character," will aid you in selecting the right plumbing fatures. Ask for Booklet P-

essarily true of all plumbing fixtures. All-clay plumbing fixtures have not the same durability and richness of glaze. There is only one way to be *sure* of getting the right kind. Specify the ware of a reliable manufacturer and look for the trade-mark before installing.

THE TRENTON POTTERIES COMPANY

TRENTON, NEW JERSEY, U.S.A.

MAKERS OF THE SILENT SI-WEL-CLO CLOSET



Have you ever looked at this trade-mark solely from a personal viewpoint?

Jenkins Bros. Valves

all bear the Diamond Trade-Mark, as shown. These valves have been inseparably associated with dependable service for half a century. The trademark therefore enables you to dispense with all time-consuming investigation incident to valve installation, to dismiss all personal concern as to the outcome and to prevent the substitution of a valve approximating the appearance but lacking the quality of the genuine Jenkins Bros. product.

Jenkins Bros. Valves maintain a perfectly steamtight service, due to the flexible and durable nature of the Jenkins Removable Disc.

There's a Jenkins Bros. Valve for every purpose. Write for catalogue.



Jenkins Bros.

80 White Street, New York. 524 Atlantic Avenue, Boston. 133 N.7° Street, Philadelphia. 300 W. Lake Street, Chicagolephia, Prog. Limited, Montreal, Canada, and London, E.C. England.





SHERARDUCT

SHERARDUCT



National Metal Molding

This molding effectually eliminates every danger due to unprotected surface wiring. It is quickly and easily installed and can be painted or enameled to match walls or woodwork. Used exclusively for extension work in many of the finest buildings in this country.

Write today for catalogue and National Metal Molding sample

National Metal Molding 6

Electrical Conduits & Fittings 7 Fulton Building, PITTSBURGH, PA.

Atlanta Boston Buffalo Dallas Denver Detroit

Los Angeles New York Philadelphia Salt Lake City San Francisco Seattle

Chicago Portland St. Louis

Buenos Aires Havana Manila Paris
CANADIAN DISTRIBUTORS—CANADIAN GENERAL ELECTRIC COMPANY, LIMITED M-4







SHERARDUCT

The Best Self-Closing Basin Cock Ever Put On a Lavatory

That is what we claim and prove for our "MONROE"—H 803 self-closing basin cock.



SPECIFY
IT ON
ALL JOBS
WHERE
SELFCLOSING
BASIN
COCKS
ARE
WANTED

IEVER handles are superior to other styles because they give the natural and easy grip necessary in opening the cock. We furnish all styles of handles, but always recommend lever handles.

Lever handles can't be used with complete success on any self-closing cock that is not equipped with a union joint, to permit the adjustments of the handle that must be made from time to time, to equalize the recessing of the seat into the seat washer. This wearing of the seat washer is inevitable in all makes and all styles of faucets and, unless there is an adjustment to take up the wear, the handle gets out of alignment.

ONLY "GLAUBER" SELF-CLOSING COCKS HAVE THE UNION JOINT

The proper bearings are balls, because they are the only kind that wear uniformly, turning around and around each time the faucet is used. Tests of GLAUBER self-closing cocks equal to more than a hundred years of service show that there is only imperceptible wear on the balls, and that they stay perfectly round. Glauber self-closing cocks are the only kind

GUARANTEED FOR FIVE YEARS

SEND FOR "H" CATALOG; Also for our 1917 Calendar, "The Stars and Stripes Forever."

GLAUBER BRASS MFG. CO.

NEW YORK

CHICAGO

ST. LOUIS

Cleveland, Ohio



Bankers' Realty Investment Company, Architects and Building Contractors

The Blackstone Hotel of Omaha is equipped throughout with the most modern plumbing fixtures from the Wolff factories. The fixtures selected for this Hotel will retain their efficiency of function and action throughout the life of the building itself.

ESTABLISHED 1855

L. WOLFF MANUFACTURING CO.

MANUFACTURERS OF

Plumbing Goods Exclusively

The only complete line made by any one firm.

General Offices

601-627 West Lake Street - - CHICAGO
Pottery, Trenton, New Jersey

The BLACKSTONE LAVATORY

